

Přílohy

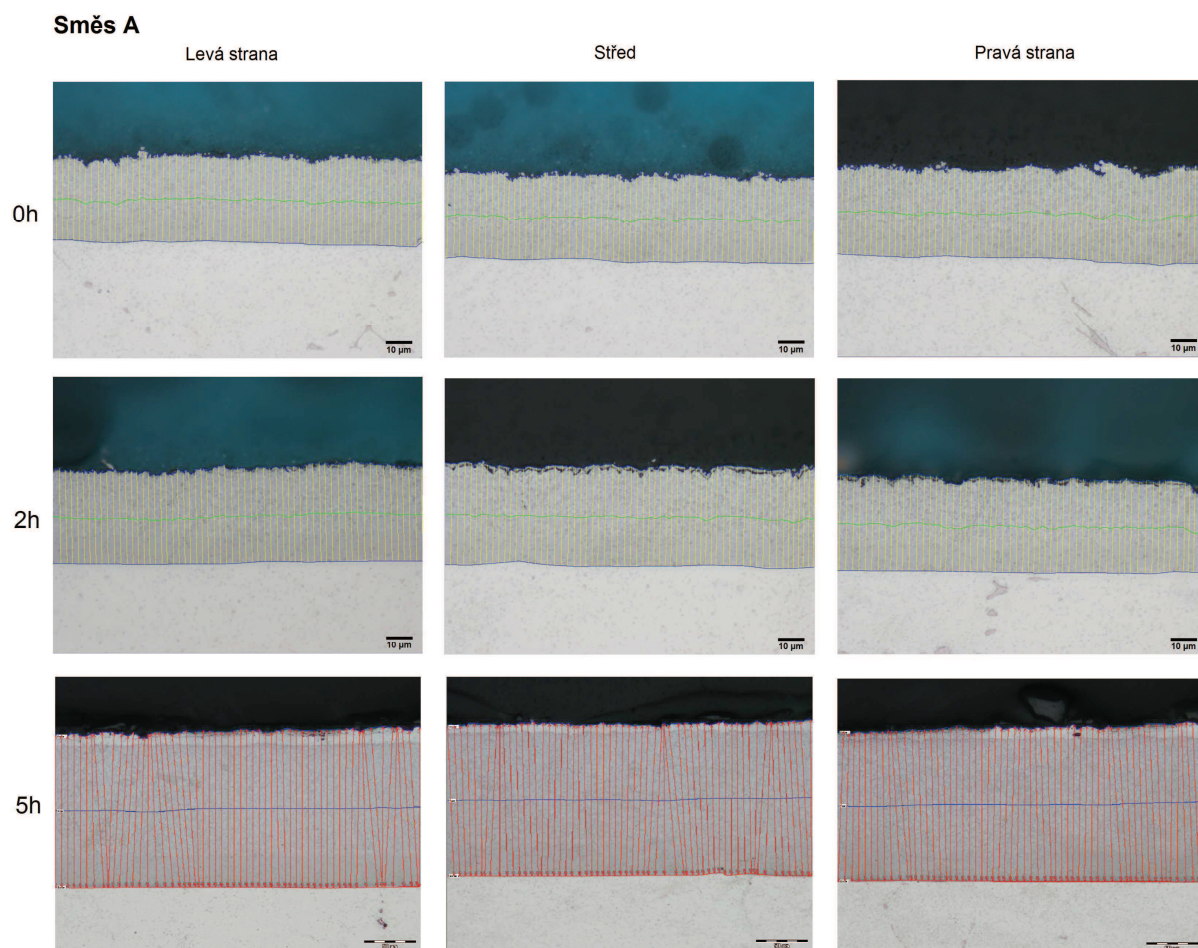
PŘÍLOHA 1: Výsledky měření tloušťky vrstev

PŘÍLOHA 2: Výsledky měření mikrotvrdoti

PŘÍLOHA 3: Výsledky chemické mikroanalýzy

PŘÍLOHA 1: Výsledky měření tloušťky vrstev

Směs A

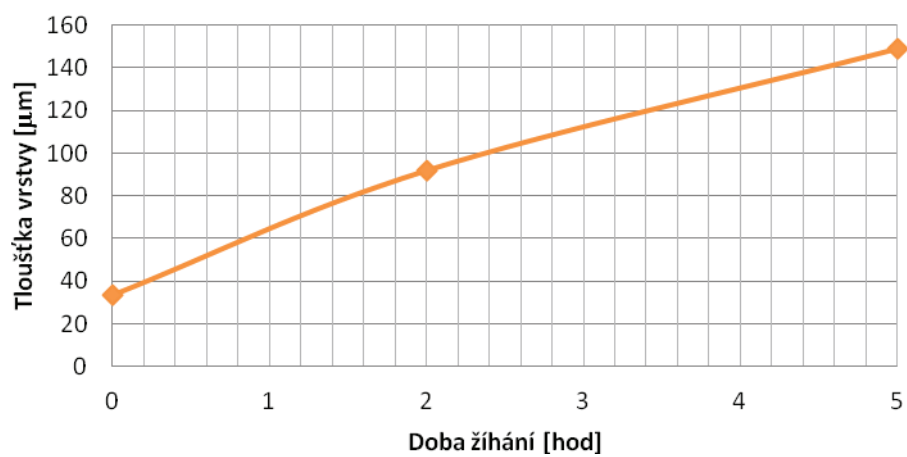


Obr. P.1.1 Vyhodnocení tloušťky vrstev směsi A.

Tab. P.1.1 Výsledky měření tloušťky vrstev vytvořených pomocí směsi A.

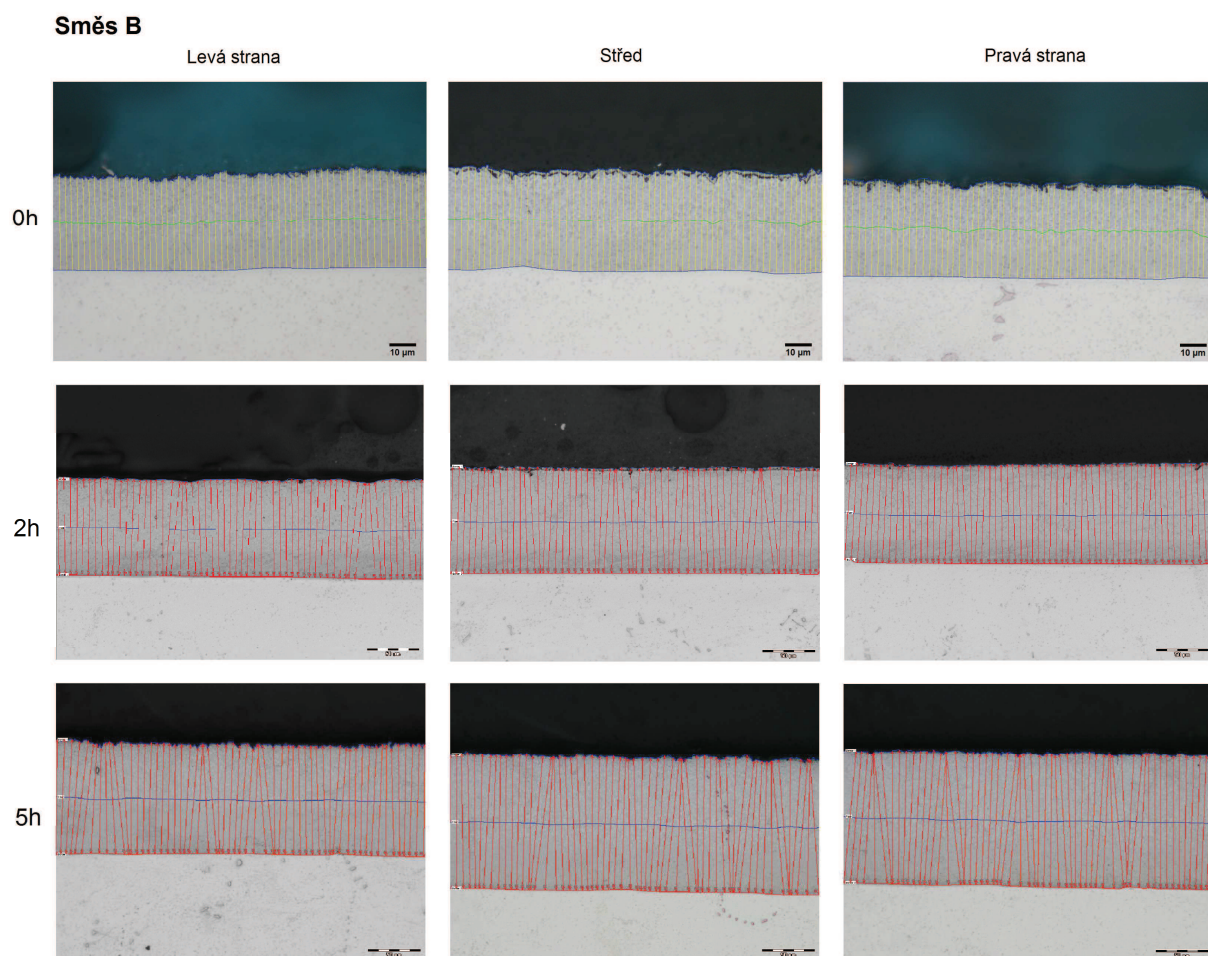
| | 0h | | | 2h | | | 5h | | |
|--------------------------------|--------------|-------|-------|--------------|-------|-------|---------------|--------|--------|
| | levá | střed | pravá | levá | střed | pravá | levá | střed | pravá |
| Minimum [µm] | 28,66 | 30,36 | 31,94 | 88,75 | 88,11 | 89,77 | 144,65 | 143,99 | 143,01 |
| Maximum [µm] | 34,70 | 34,96 | 38,06 | 96,08 | 94,88 | 97,13 | 155,70 | 151,84 | 154,74 |
| Stř. hodnota [µm] | 32,59 | 32,48 | 34,53 | 91,48 | 90,93 | 92,94 | 151,29 | 147,27 | 148,63 |
| Prům. stř. hodnoty [µm] | 33,20 | | | 91,78 | | | 149,06 | | |
| Směrodatná odchylka | 1,18 | 0,90 | 1,60 | 1,77 | 1,59 | 1,98 | 2,43 | 1,56 | 2,95 |

Směs A



Obr. P.1.2 Závislost růstu difuzní vrstvy v závislosti na čase pro směs A.

Směs B

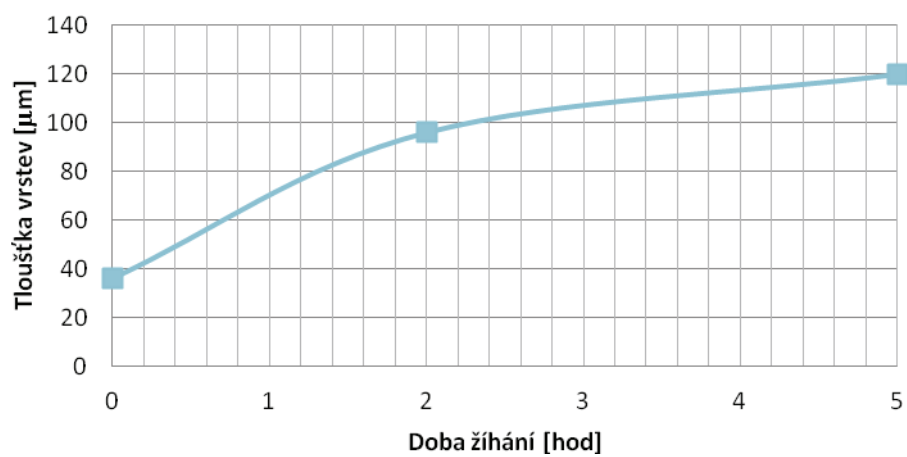


Obr. P.1.3 Vyhodnocení tloušťky vrstev směsi B.

Tab. P.1.2 Výsledky měření tloušťky vrstev vytvořených pomocí směsi B.

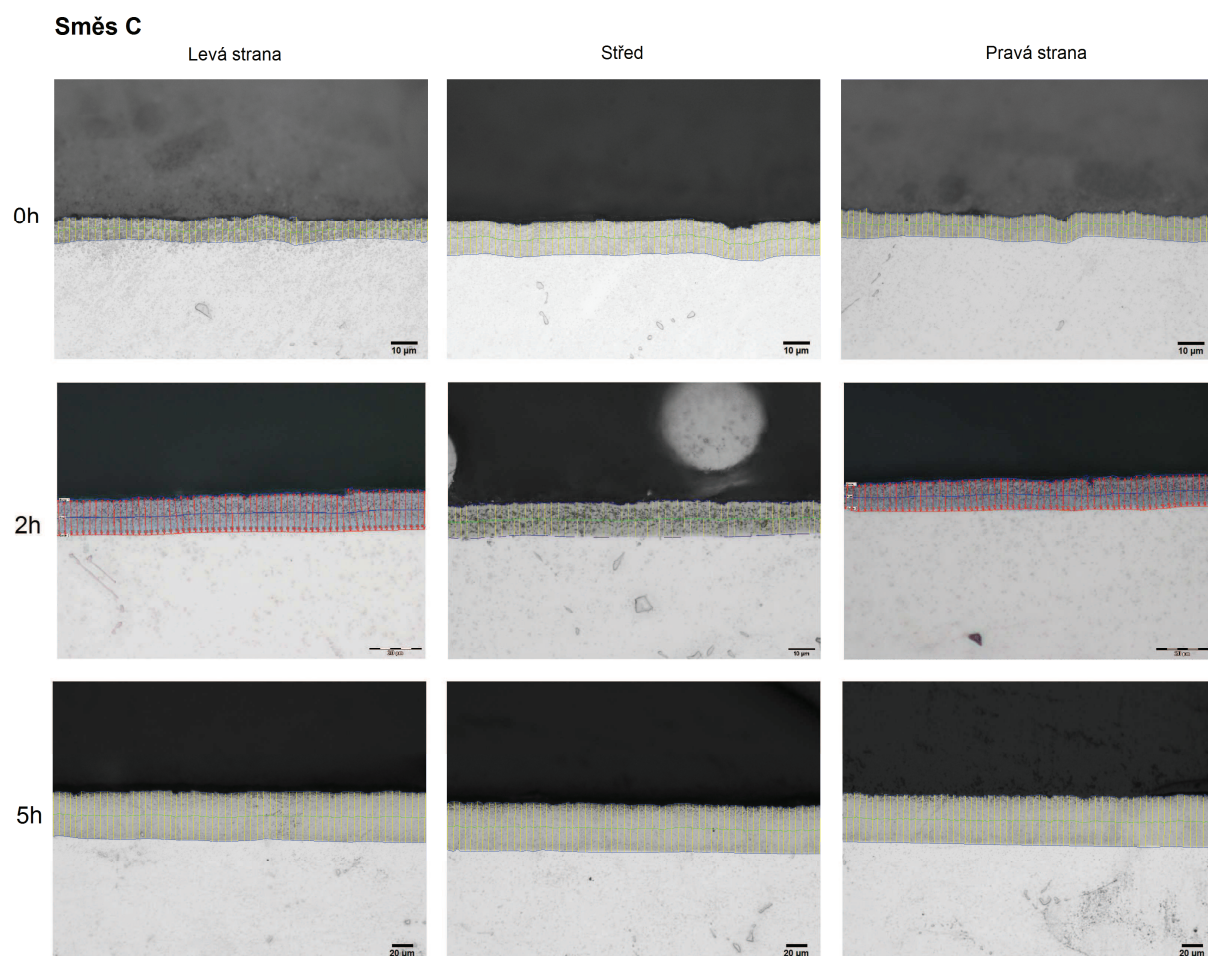
| | 0h | | | 2h | | | 5h | | |
|---|--------------|-------|-------|--------------|--------|-------|---------------|--------|--------|
| | levá | střed | pravá | levá | střed | pravá | levá | střed | pravá |
| Minimum [μm] | 34,08 | 34,18 | 29,92 | 90,77 | 98,47 | 91,73 | 100,01 | 124,56 | 124,08 |
| Maximum [μm] | 38,02 | 39,64 | 37,05 | 96,01 | 102,53 | 96,82 | 109,68 | 131,39 | 130,05 |
| Stř. hodnota [μm] | 36,01 | 37,63 | 35,30 | 93,26 | 100,58 | 94,56 | 104,87 | 127,91 | 127,25 |
| Prům. stř. hodnoty [μm] | 36,31 | | | 96,13 | | | 120,01 | | |
| Směrodatná odchylka | 0,99 | 1,06 | 1,41 | 1,23 | 0,95 | 1,14 | 2,14 | 1,41 | 1,40 |

Směs B



Obr. P.1.4 Závislost růstu difuzní vrstvy v závislosti na čase pro směs B.

Směs C

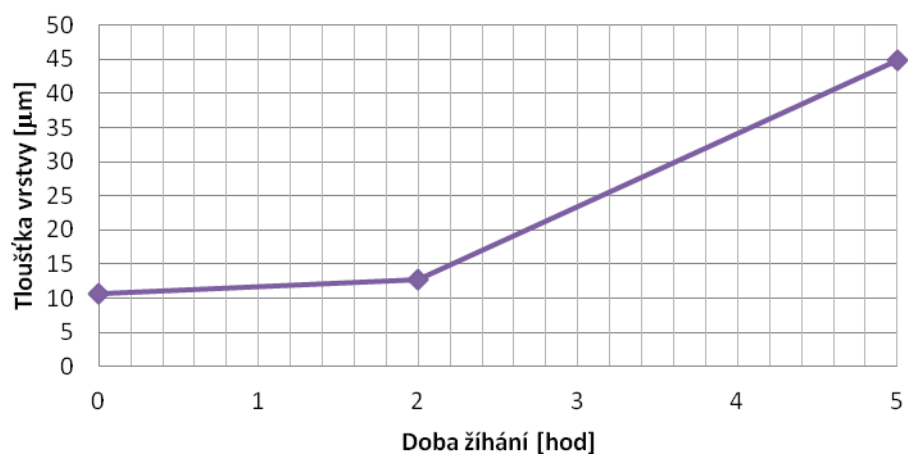


Obr. P.1.5 Vyhodnocení tloušťky vrstev směsi C.

Tab. P.1.3 Výsledky měření tloušťky vrstev vytvořených pomocí směsi C.

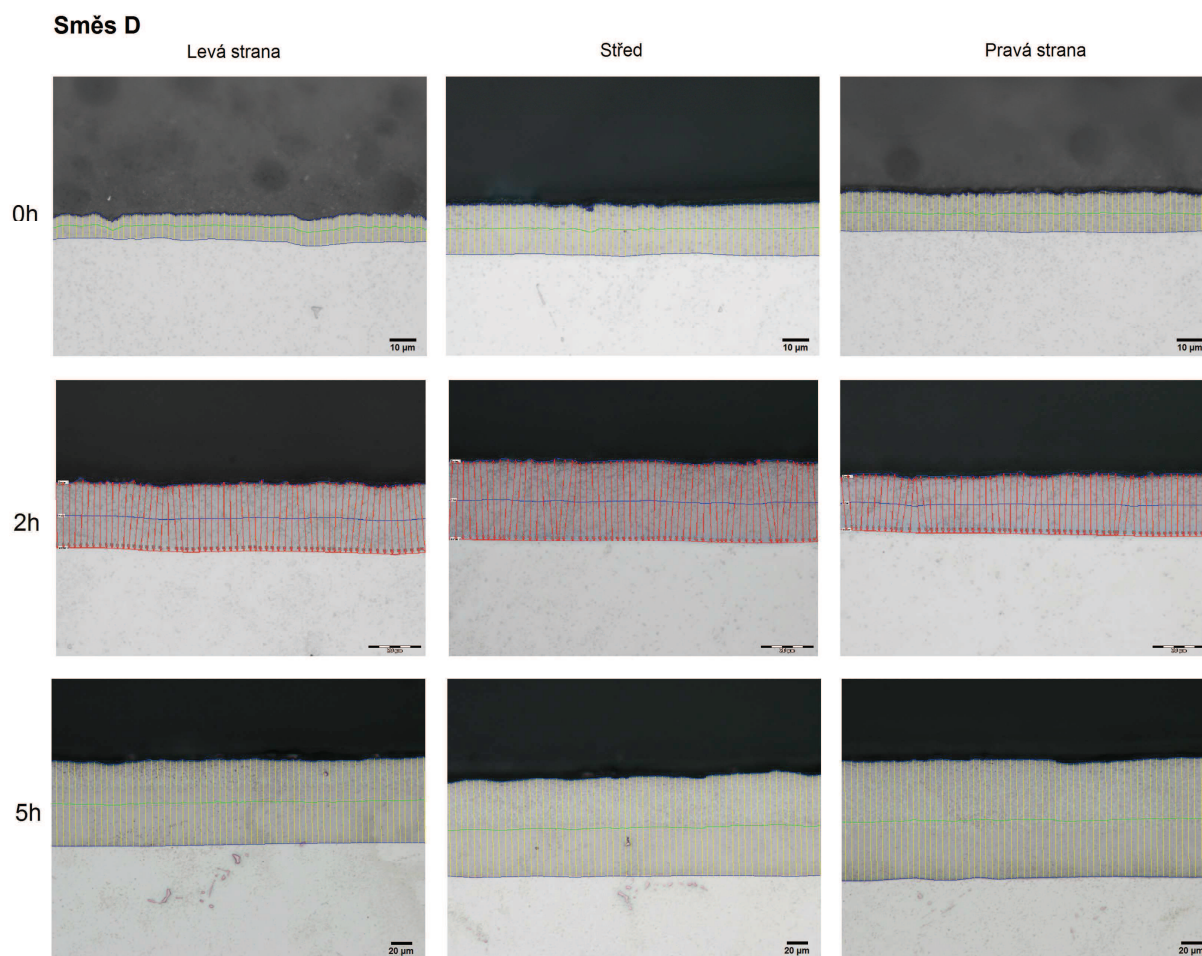
| | 0h | | | 2h | | | 5h | | |
|---|--------------|-------|-------|--------------|-------|-------|--------------|-------|-------|
| | levá | střed | pravá | levá | střed | pravá | levá | střed | pravá |
| Minimum [μm] | 7,33 | 11,60 | 8,78 | 12,76 | 11,31 | 9,10 | 39,87 | 42,39 | 42,37 |
| Maximum [μm] | 11,15 | 14,27 | 12,12 | 16,07 | 14,19 | 13,22 | 47,83 | 46,40 | 48,67 |
| Stř. hodnota [μm] | 8,90 | 12,76 | 10,05 | 14,20 | 12,76 | 11,46 | 44,61 | 44,22 | 45,71 |
| Prům. stř. hodnoty [μm] | 10,57 | | | 12,76 | | | 44,85 | | |
| Směrodatná odchylka | 0,85 | 0,55 | 0,73 | 0,71 | 0,70 | 0,81 | 1,65 | 0,89 | 1,41 |

Směs C



Obr. P.1.6 Závislost růstu difuzní vrstvy v závislosti na čase pro směs C.

Směs D

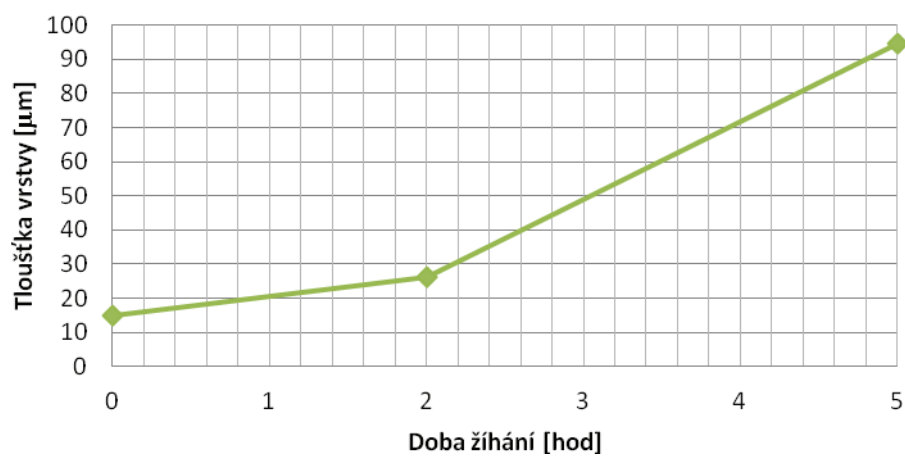


Obr. P.1.7 Vyhodnocení tloušťky vrstev směsi D.

Tab. 4 Výsledky měření tloušťky vrstev vytvořených pomocí směsi D.

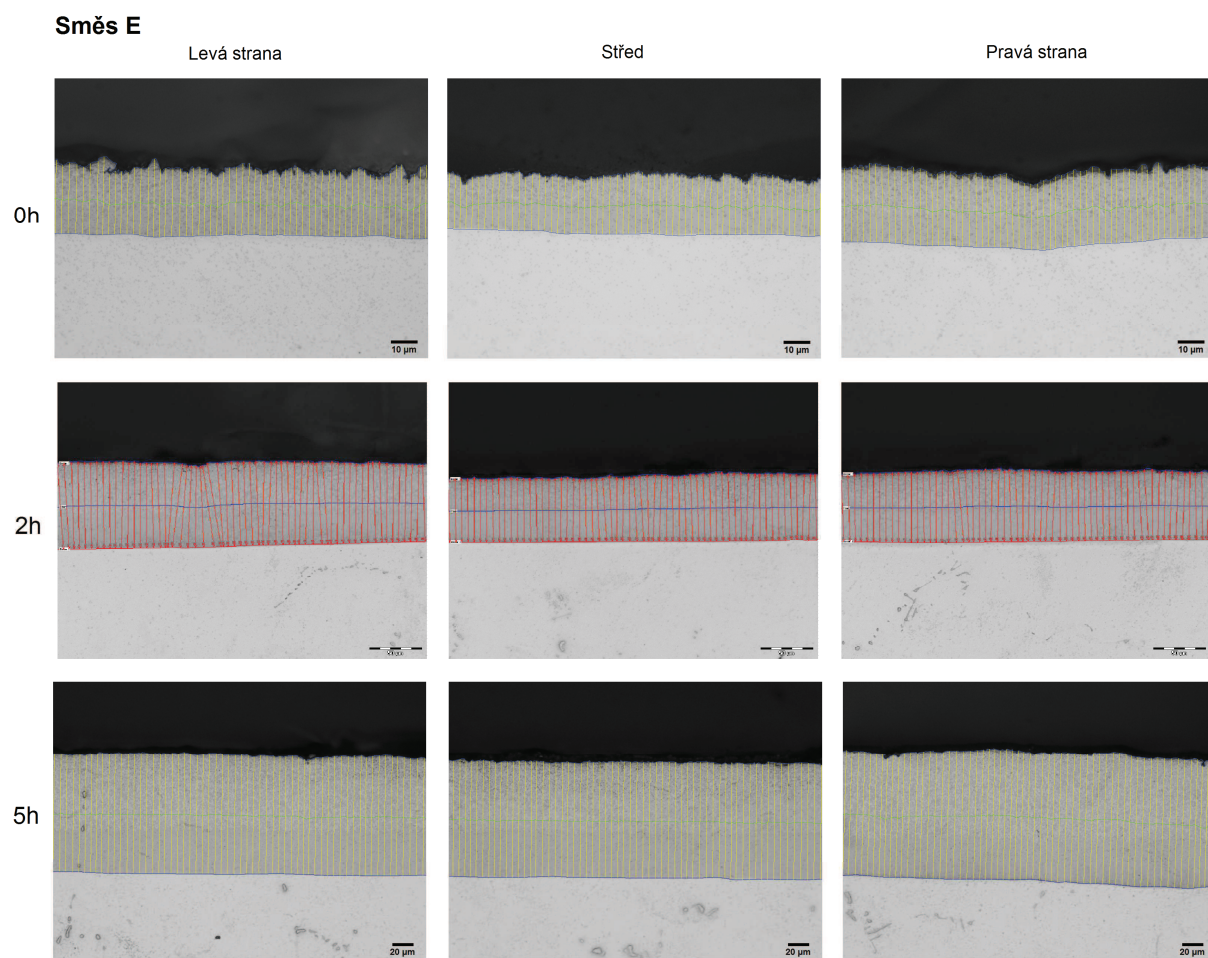
| | 0h | | | 2h | | | 5h | | |
|---|--------------|-------|-------|--------------|-------|-------|--------------|--------|--------|
| | levá | střed | pravá | levá | střed | pravá | levá | střed | pravá |
| Minimum [μm] | 6,26 | 17,07 | 13,84 | 24,56 | 29,26 | 20,18 | 75,88 | 88,11 | 107,14 |
| Maximum [μm] | 11,65 | 20,59 | 16,17 | 27,24 | 32,00 | 24,09 | 80,20 | 100,19 | 114,03 |
| Stř. hodnota [μm] | 10,25 | 19,41 | 15,11 | 25,88 | 30,23 | 22,22 | 78,25 | 93,96 | 111,33 |
| Prům. stř. hodnoty [μm] | 14,92 | | | 26,11 | | | 94,52 | | |
| Směrodatná odchylka | 0,94 | 0,68 | 0,58 | 0,64 | 0,63 | 0,96 | 1,13 | 2,54 | 1,77 |

Směs D



Obr. P.1.8 Závislost růstu difuzní vrstvy v závislosti na čase pro směs D.

Směs E

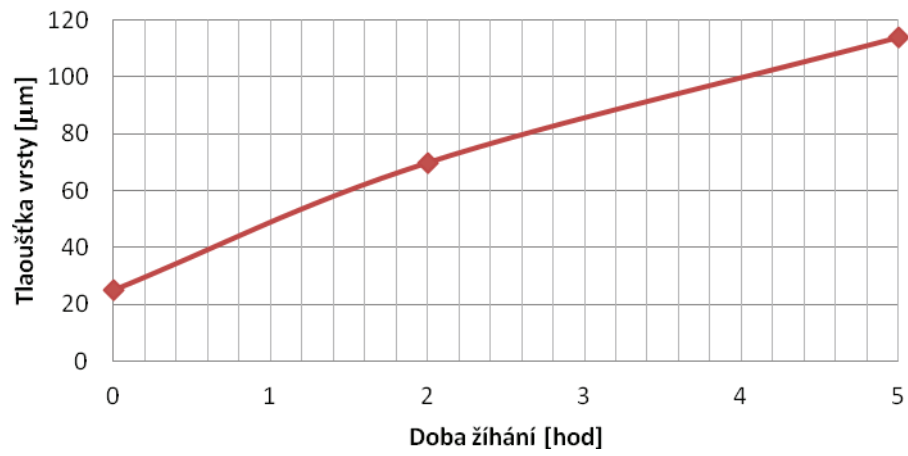


Obr. P.1.9 Vyhodnocení tloušťky vrstev směsi E.

Tab. 5 Výsledky měření tloušťky vrstev vytvořených pomocí směsi E.

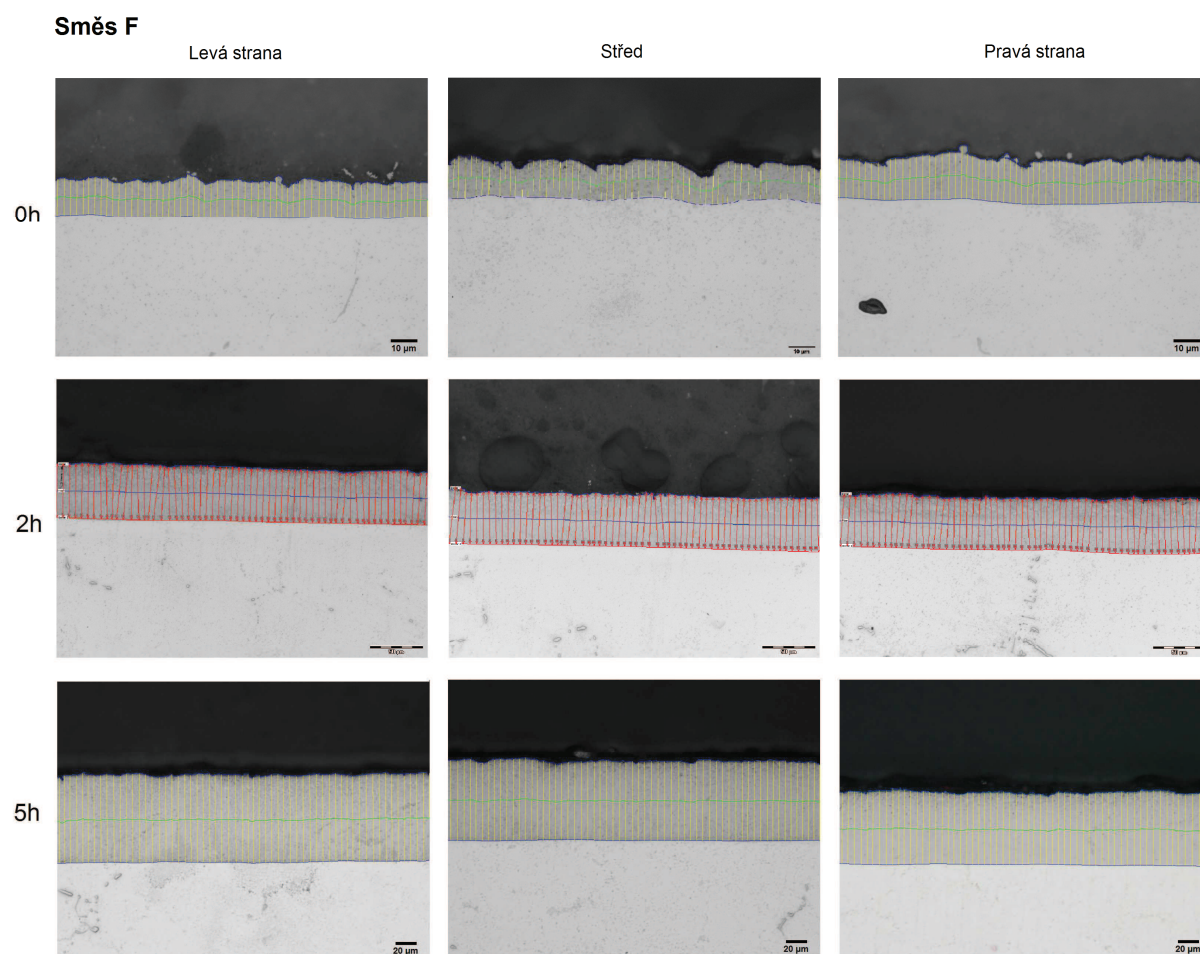
| | 0h | | | 2h | | | 5h | | |
|--------------------------------|--------------|-------|-------|--------------|-------|-------|---------------|--------|--------|
| | levá | střed | pravá | levá | střed | pravá | levá | střed | pravá |
| Minimum [μm] | 22,09 | 18,09 | 25,12 | 74,08 | 60,09 | 63,82 | 108,64 | 107,04 | 112,55 |
| Maximum [μm] | 29,66 | 23,80 | 29,92 | 83,83 | 66,63 | 70,63 | 115,04 | 110,89 | 125,08 |
| Stř. hodnota [μm] | 25,38 | 21,85 | 27,72 | 79,83 | 62,90 | 67,12 | 112,37 | 109,33 | 120,71 |
| Prům. stř. hodnoty [μm] | 24,98 | | | 69,95 | | | 114,13 | | |
| Směrodatná odchylka | 1,68 | 1,14 | 1,16 | 2,65 | 1,67 | 1,63 | 1,40 | 0,82 | 2,83 |

Směs E



Obr. P.1.10 Závislost růstu difuzní vrstvy v závislosti na čase pro směs E.

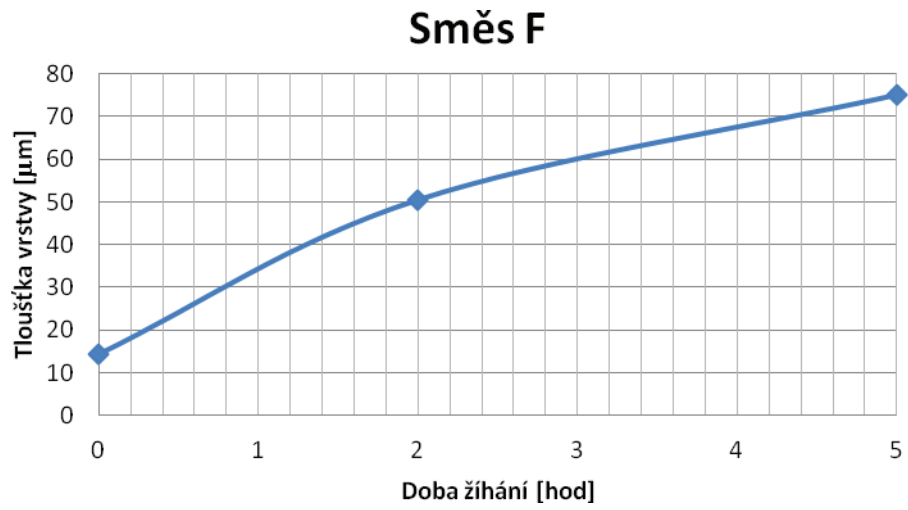
Směs F



Obr. P.1.11 Vyhodnocení tloušťky vrstev směsi F.

Tab. 6 Výsledky měření tloušťky vrstev vytvořených pomocí směsi F.

| | 0h | | | 2h | | | 5h | | |
|---|--------------|-------|-------|--------------|-------|-------|--------------|-------|-------|
| | levá | střed | pravá | levá | střed | pravá | levá | střed | pravá |
| Minimum [μm] | 11,88 | 10,51 | 12,97 | 47,56 | 48,21 | 48,20 | 80,17 | 69,52 | 65,25 |
| Maximum [μm] | 15,78 | 15,80 | 19,65 | 52,84 | 54,58 | 55,41 | 85,01 | 76,32 | 72,83 |
| Stř. hodnota [μm] | 13,76 | 13,36 | 15,65 | 50,35 | 50,14 | 50,82 | 82,67 | 73,30 | 69,18 |
| Prům. stř. hodnoty [μm] | 14,26 | | | 50,44 | | | 75,05 | | |
| Směrodatná odchylka | 0,69 | 1,24 | 1,12 | 1,24 | 1,11 | 1,59 | 1,08 | 1,35 | 1,46 |



Obr. P.1.12 Závislost růstu difuzní vrstvy v závislosti na čase pro směs A.

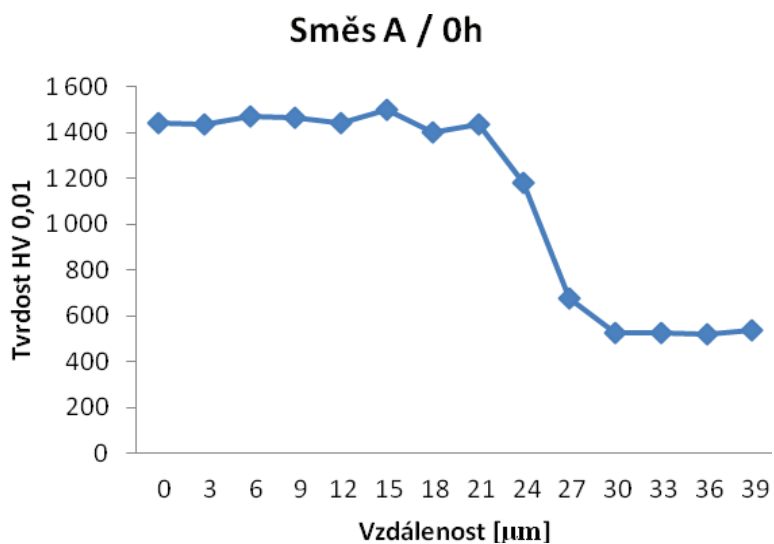
PŘÍLOHA 2: Výsledky měření mikrotvrdosti

Směs A

A / 0h

Tab. P.2.1 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi A po 0h.

| Směs A / 0h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 985 | HV 0,01 |
| 2 | 3 | 1 440 | HV 0,01 |
| 3 | 6 | 1 435 | HV 0,01 |
| 4 | 9 | 1 467 | HV 0,01 |
| 5 | 12 | 1 464 | HV 0,01 |
| 6 | 15 | 1 440 | HV 0,01 |
| 7 | 18 | 1 501 | HV 0,01 |
| 8 | 21 | 1 400 | HV 0,01 |
| 9 | 24 | 1 435 | HV 0,01 |
| 10 | 27 | 1 177 | HV 0,01 |
| 11 | 30 | 673 | HV 0,01 |
| 12 | 33 | 524 | HV 0,01 |
| 13 | 36 | 524 | HV 0,01 |
| 14 | 39 | 517 | HV 0,01 |
| 15 | 42 | 538 | HV 0,01 |

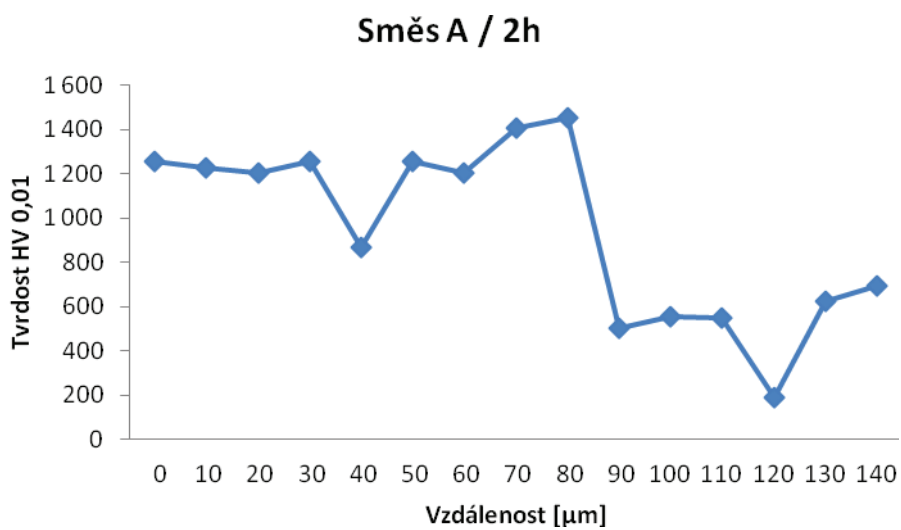
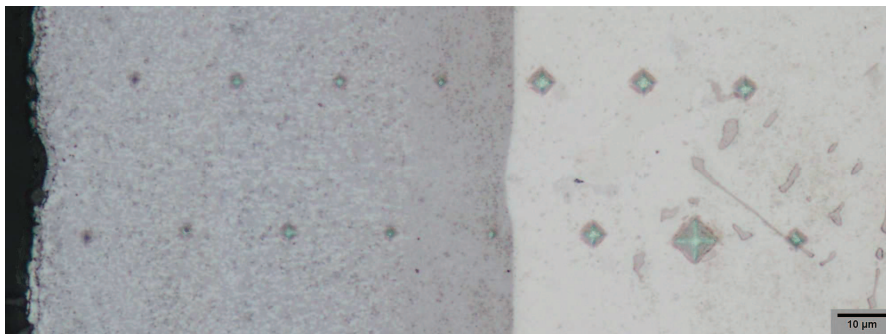


Obr. P.2.1 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs A po difuzním žihání 0h.

A / 2h

Tab. P.2.2 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi A po 2h.

| Směs A / 2h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 258 | HV 0,01 |
| 2 | 10 | 1 229 | HV 0,01 |
| 3 | 20 | 1 204 | HV 0,01 |
| 4 | 30 | 1 254 | HV 0,01 |
| 5 | 40 | 867 | HV 0,01 |
| 6 | 50 | 1 258 | HV 0,01 |
| 7 | 60 | 1 204 | HV 0,01 |
| 8 | 70 | 1 403 | HV 0,01 |
| 9 | 80 | 1 452 | HV 0,01 |
| 10 | 90 | 502 | HV 0,01 |
| 11 | 100 | 554 | HV 0,01 |
| 12 | 110 | 547 | HV 0,01 |
| 13 | 120 | 187 | HV 0,01 |
| 14 | 130 | 623 | HV 0,01 |
| 15 | 140 | 695 | HV 0,01 |

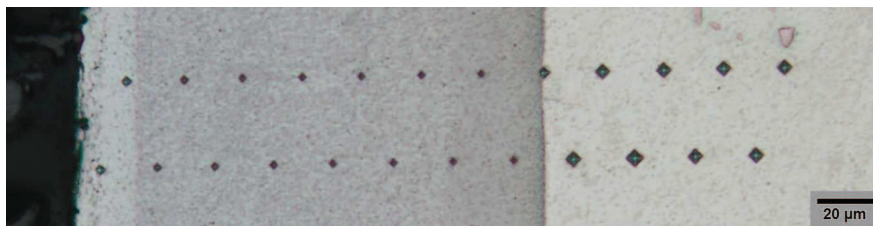


Obr. P.2.2 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs A po difuzním žihání 2h.

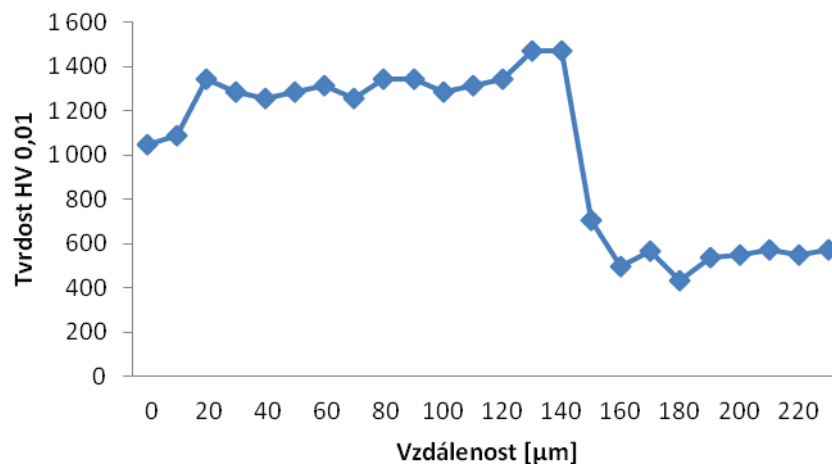
A / 5h

Tab. P.2.3 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi A po 5h.

| Směs A / 5h | | | | | | | |
|-------------|------------------------------|---------|---------|-----|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | | Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 044 | HV 0,01 | 13 | 120 | 1 340 | HV 0,01 |
| 2 | 10 | 1 085 | HV 0,01 | 14 | 130 | 1 467 | HV 0,01 |
| 3 | 20 | 1 344 | HV 0,01 | 15 | 140 | 1 467 | HV 0,01 |
| 4 | 30 | 1 284 | HV 0,01 | 16 | 150 | 706 | HV 0,01 |
| 5 | 40 | 1 254 | HV 0,01 | 17 | 160 | 495 | HV 0,01 |
| 6 | 50 | 1 284 | HV 0,01 | 18 | 170 | 563 | HV 0,01 |
| 7 | 60 | 1 312 | HV 0,01 | 19 | 180 | 430 | HV 0,01 |
| 8 | 70 | 1 258 | HV 0,01 | 20 | 190 | 538 | HV 0,01 |
| 9 | 80 | 1 340 | HV 0,01 | 21 | 200 | 547 | HV 0,01 |
| 10 | 90 | 1 340 | HV 0,01 | 22 | 210 | 571 | HV 0,01 |
| 11 | 100 | 1 284 | HV 0,01 | 23 | 220 | 546 | HV 0,01 |
| 12 | 110 | 1 312 | HV 0,01 | 24 | 230 | 570 | HV 0,01 |



Směs A / 5h



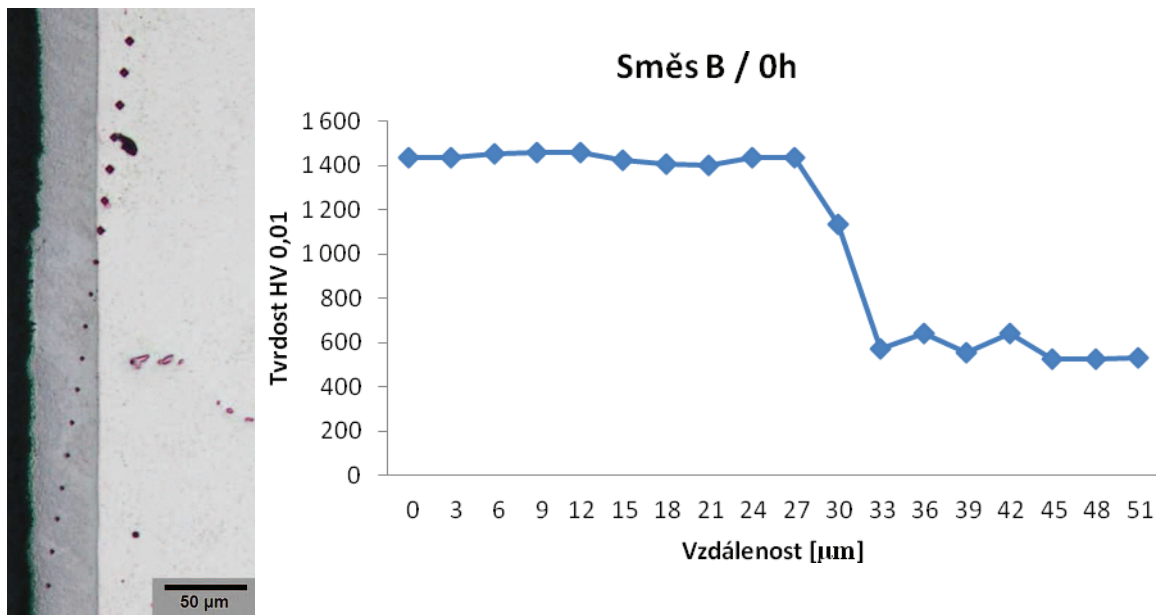
Obr. P.2.3 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs A po difuzním žhání 5h.

Směs B

B / 0h

Tab. P.2.4 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi B po 0h.

| Směs B / 0h | | | | | | | |
|-------------|------------------------------|---------|---------|-----|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | | Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 435 | HV 0,01 | 10 | 27 | 1 435 | HV 0,01 |
| 2 | 3 | 1 435 | HV 0,01 | 11 | 30 | 1 131 | HV 0,01 |
| 3 | 6 | 1 451 | HV 0,01 | 12 | 33 | 570 | HV 0,01 |
| 4 | 9 | 1 458 | HV 0,01 | 13 | 36 | 643 | HV 0,01 |
| 5 | 12 | 1 457 | HV 0,01 | 14 | 39 | 554 | HV 0,01 |
| 6 | 15 | 1 421 | HV 0,01 | 15 | 42 | 643 | HV 0,01 |
| 7 | 18 | 1 403 | HV 0,01 | 16 | 45 | 524 | HV 0,01 |
| 8 | 21 | 1 400 | HV 0,01 | 17 | 48 | 524 | HV 0,01 |
| 9 | 24 | 1 435 | HV 0,01 | 18 | 51 | 531 | HV 0,01 |



Obr. P.2.4 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs B po difuzním žihání 0h.

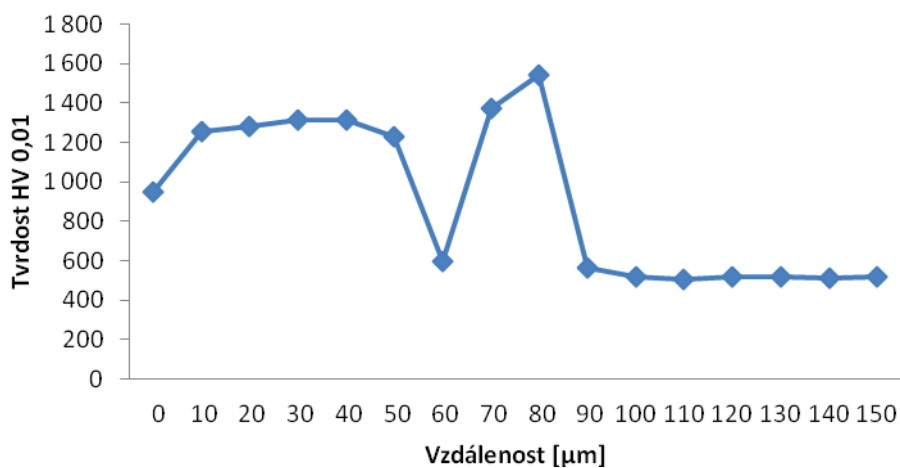
B / 2h

Tab. P.2.5 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi B po 2h.

| Směs B / 2h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 949 | HV 0,01 |
| 2 | 10 | 1 254 | HV 0,01 |
| 3 | 20 | 1 284 | HV 0,01 |
| 4 | 30 | 1 312 | HV 0,01 |
| 5 | 40 | 1 312 | HV 0,01 |
| 6 | 50 | 1 229 | HV 0,01 |
| 7 | 60 | 597 | HV 0,01 |
| 8 | 70 | 1 373 | HV 0,01 |
| 9 | 80 | 1 540 | HV 0,01 |
| 10 | 90 | 562 | HV 0,01 |
| 11 | 100 | 517 | HV 0,01 |
| 12 | 110 | 509 | HV 0,01 |
| 13 | 120 | 517 | HV 0,01 |
| 14 | 130 | 517 | HV 0,01 |
| 15 | 140 | 510 | HV 0,01 |
| 16 | 150 | 517 | HV 0,01 |



Směs B / 2h

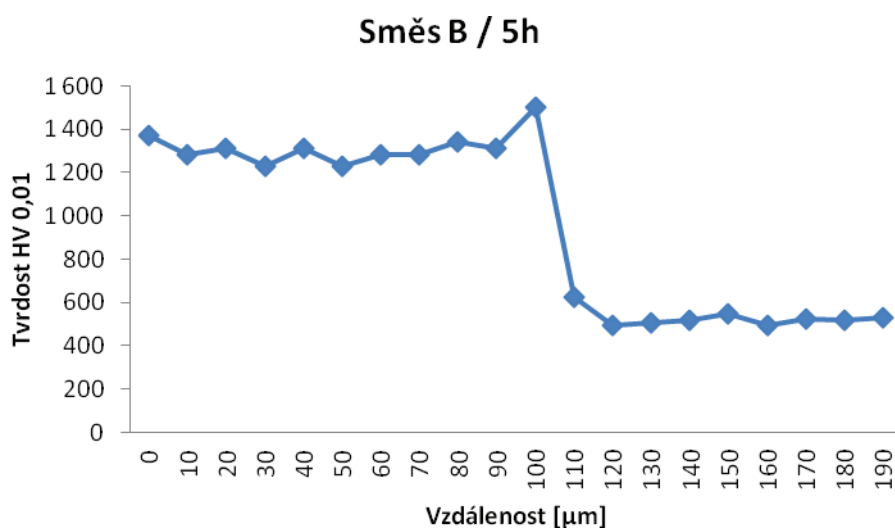
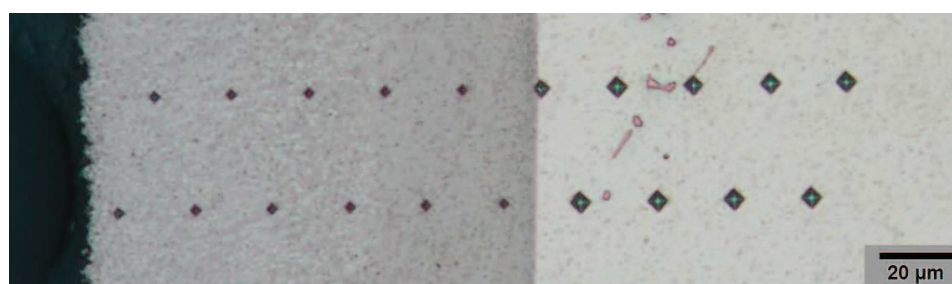


Obr. P.2.5 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs B po difuzním žhání 2h.

B / 5h

Tab. P.2.6 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi B po 5h.

| Směs B / 5h | | | | | | | |
|-------------|-----------------|---------|---------|-----|-----------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrđost | | Bod | Vzdálenost [μm] | Tvrđost | |
| 1 | 0 | 1 369 | HV 0,01 | 11 | 100 | 1 501 | HV 0,01 |
| 2 | 10 | 1 281 | HV 0,01 | 12 | 110 | 624 | HV 0,01 |
| 3 | 20 | 1 312 | HV 0,01 | 13 | 120 | 495 | HV 0,01 |
| 4 | 30 | 1 229 | HV 0,01 | 14 | 130 | 509 | HV 0,01 |
| 5 | 40 | 1 312 | HV 0,01 | 15 | 140 | 517 | HV 0,01 |
| 6 | 50 | 1 229 | HV 0,01 | 16 | 150 | 546 | HV 0,01 |
| 7 | 60 | 1 284 | HV 0,01 | 17 | 160 | 496 | HV 0,01 |
| 8 | 70 | 1 284 | HV 0,01 | 18 | 170 | 524 | HV 0,01 |
| 9 | 80 | 1 340 | HV 0,01 | 19 | 180 | 517 | HV 0,01 |
| 10 | 90 | 1 312 | HV 0,01 | 20 | 190 | 531 | HV 0,01 |



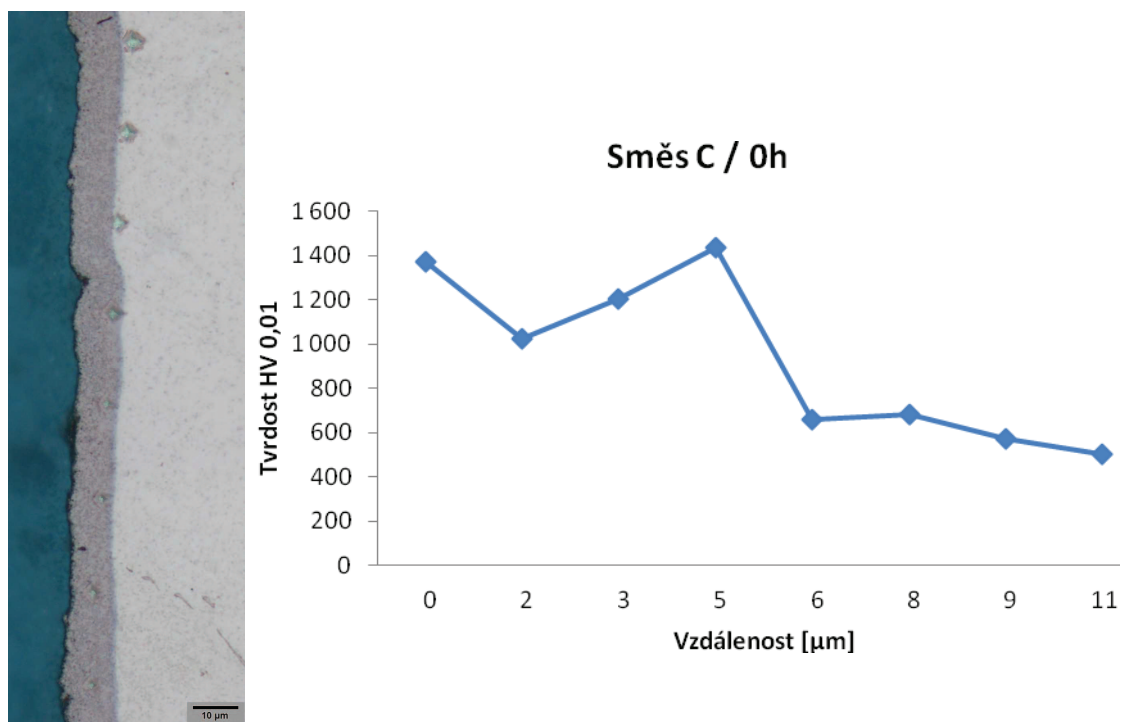
Obr. P.2.6 Závislost tvrdosti difúzní vrstvy na vzdálenosti pro směs B po difúzním žihání 5h.

Směs C

C / 0h

Tab. P.2.7 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi C po 0h.

| Směs C / 0h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrđost | |
| 1 | 0 | 1 373 | HV 0,01 |
| 2 | 2 | 1 024 | HV 0,01 |
| 3 | 3 | 1 201 | HV 0,01 |
| 4 | 5 | 1 435 | HV 0,01 |
| 5 | 6 | 661 | HV 0,01 |
| 6 | 8 | 683 | HV 0,01 |
| 7 | 9 | 570 | HV 0,01 |
| 8 | 11 | 502 | HV 0,01 |

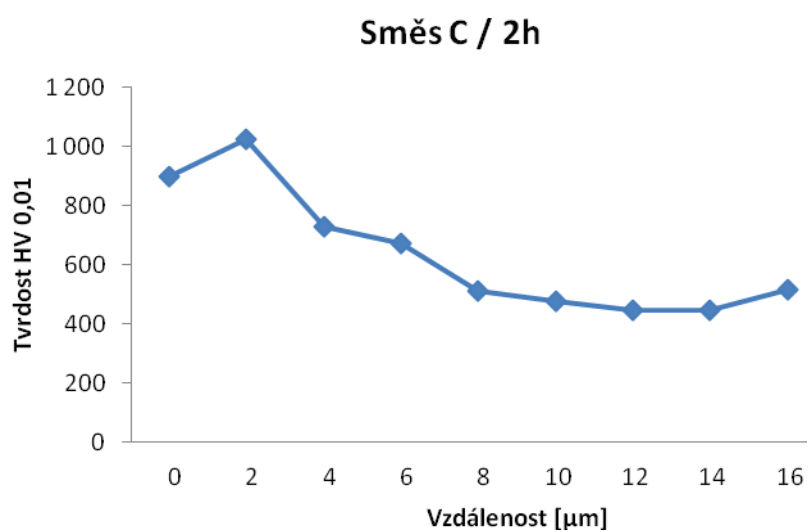


Obr. P.2.7 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs C po difuzním žihání 0h.

C / 2h

Tab. P.2.8 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi C po 2h.

| Směs C / 2h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 898 | HV 0,01 |
| 2 | 2 | 1 022 | HV 0,01 |
| 3 | 4 | 730 | HV 0,01 |
| 4 | 6 | 673 | HV 0,01 |
| 5 | 8 | 509 | HV 0,01 |
| 6 | 10 | 476 | HV 0,01 |
| 7 | 12 | 446 | HV 0,01 |
| 8 | 14 | 446 | HV 0,01 |
| 9 | 16 | 517 | HV 0,01 |

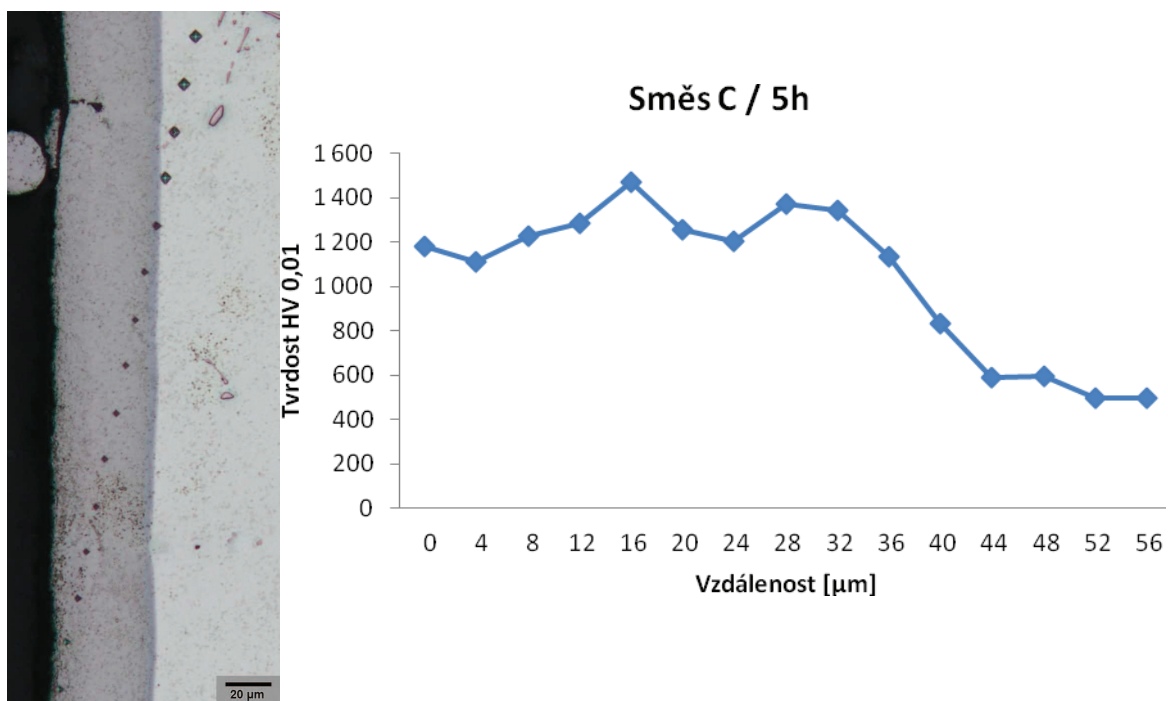


Obr. P.2.8 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs C po difuzním žhání 2h.

C / 5h

Tab. P.2.9 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi C po 5h.

| Směs C / 5h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdość | |
| 1 | 0 | 1 177 | HV 0,01 |
| 2 | 4 | 1 109 | HV 0,01 |
| 3 | 8 | 1 229 | HV 0,01 |
| 4 | 12 | 1 284 | HV 0,01 |
| 5 | 16 | 1 467 | HV 0,01 |
| 6 | 20 | 1 254 | HV 0,01 |
| 7 | 24 | 1 204 | HV 0,01 |
| 8 | 28 | 1 373 | HV 0,01 |
| 9 | 32 | 1 344 | HV 0,01 |
| 10 | 36 | 1 131 | HV 0,01 |
| 11 | 40 | 834 | HV 0,01 |
| 12 | 44 | 587 | HV 0,01 |
| 13 | 48 | 597 | HV 0,01 |
| 14 | 52 | 495 | HV 0,01 |
| 15 | 56 | 496 | HV 0,01 |



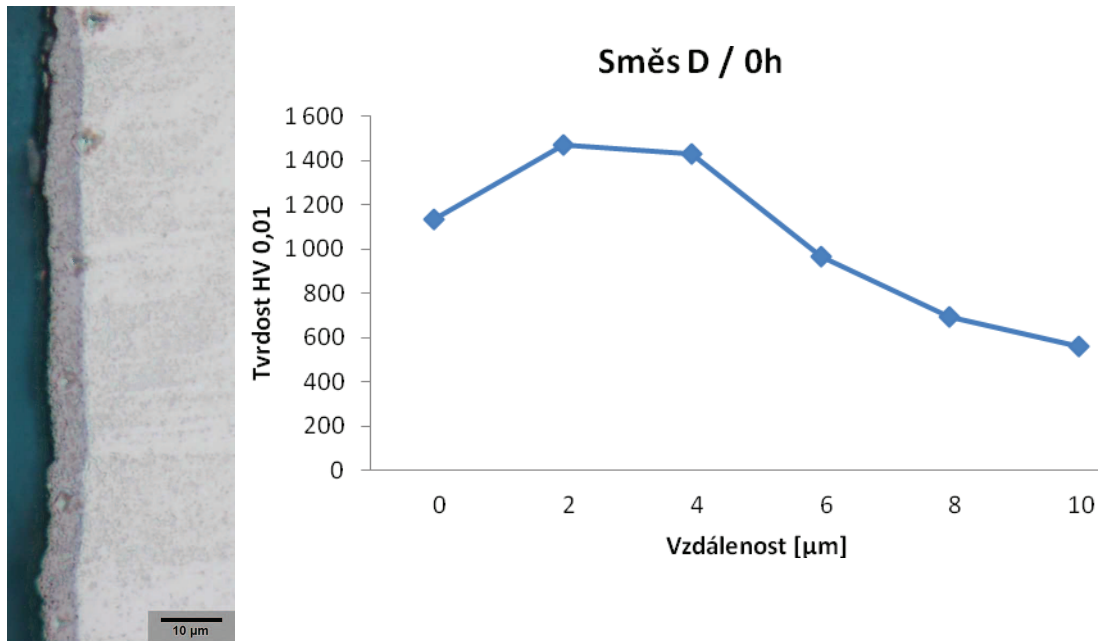
Obr. P.2.9 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs C po difuzním žihání 5h.

Směs D

D / 0h

Tab. P.2.10 Výsledky měření mikrotvrdomosti vrstev vytvořených pomocí směsi D po 0h.

| Směs D / 0h | | | |
|-------------|------------------------------|-----------|---------|
| Bod | Vzdálenost [μm] | Tvrdomost | |
| 1 | 0 | 1 131 | HV 0,01 |
| 2 | 2 | 1 471 | HV 0,01 |
| 3 | 4 | 1 431 | HV 0,01 |
| 4 | 6 | 964 | HV 0,01 |
| 5 | 8 | 695 | HV 0,01 |
| 6 | 10 | 562 | HV 0,01 |

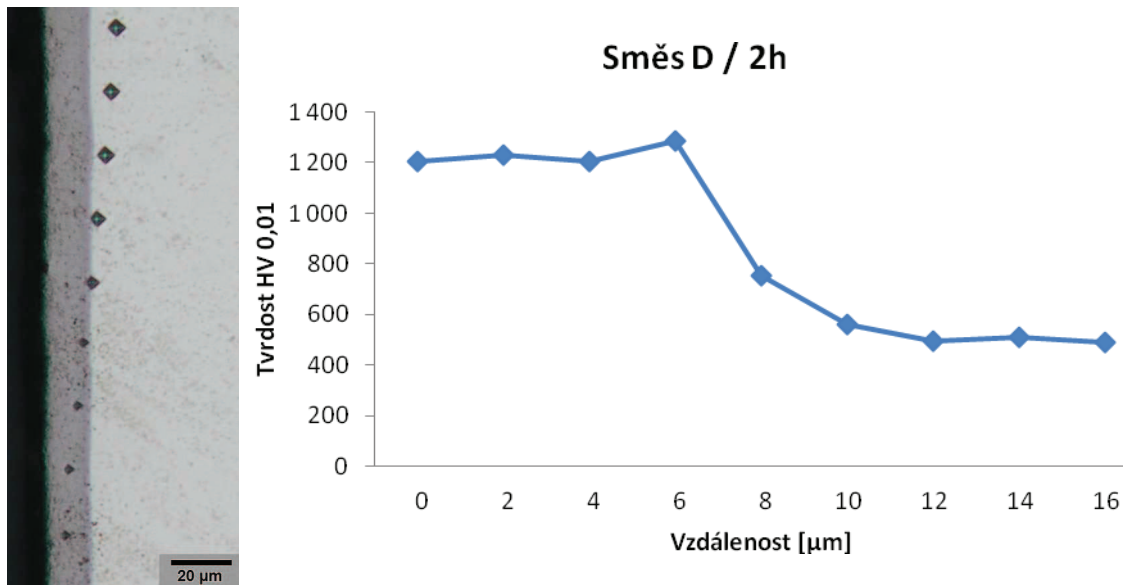


Obr. P.2.10 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs D po difuzním žhání 0h.

D / 2h

Tab. P.2.11 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi D po 2h.

| Směs D / 2h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 204 | HV 0,01 |
| 2 | 2 | 1 229 | HV 0,01 |
| 3 | 4 | 1 204 | HV 0,01 |
| 4 | 6 | 1 284 | HV 0,01 |
| 5 | 8 | 755 | HV 0,01 |
| 6 | 10 | 562 | HV 0,01 |
| 7 | 12 | 495 | HV 0,01 |
| 8 | 14 | 509 | HV 0,01 |
| 9 | 16 | 489 | HV 0,01 |

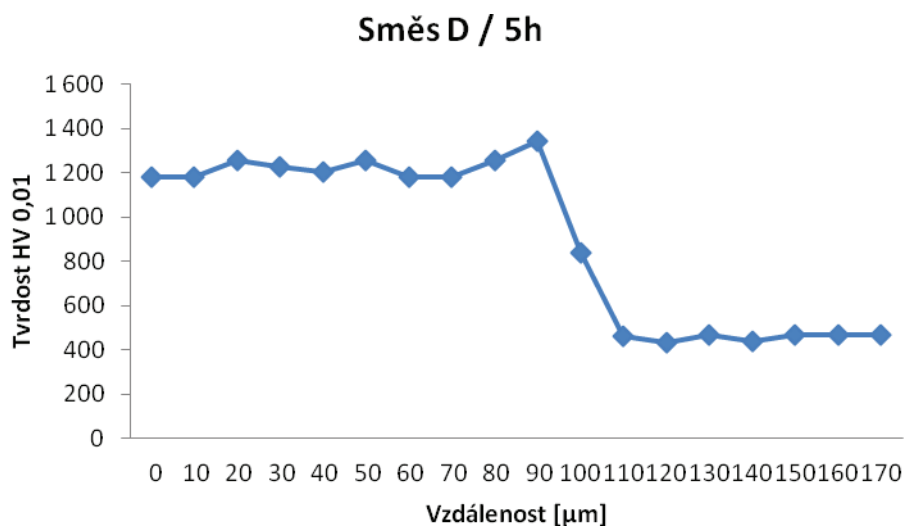


Obr. P.2.11 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs D po difuzním žhání 2h.

D / 5h

Tab. P.2.12 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi D po 5h.

| Směs D / 5h | | | | | | | |
|-------------|-----------------|---------|---------|-----|-----------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | | Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 180 | HV 0,01 | 10 | 90 | 1 344 | HV 0,01 |
| 2 | 10 | 1 180 | HV 0,01 | 11 | 100 | 836 | HV 0,01 |
| 3 | 20 | 1 254 | HV 0,01 | 12 | 110 | 464 | HV 0,01 |
| 4 | 30 | 1 229 | HV 0,01 | 13 | 120 | 435 | HV 0,01 |
| 5 | 40 | 1 204 | HV 0,01 | 14 | 130 | 470 | HV 0,01 |
| 6 | 50 | 1 258 | HV 0,01 | 15 | 140 | 440 | HV 0,01 |
| 7 | 60 | 1 180 | HV 0,01 | 16 | 150 | 470 | HV 0,01 |
| 8 | 70 | 1 177 | HV 0,01 | 17 | 160 | 470 | HV 0,01 |
| 9 | 80 | 1 254 | HV 0,01 | 18 | 170 | 470 | HV 0,01 |



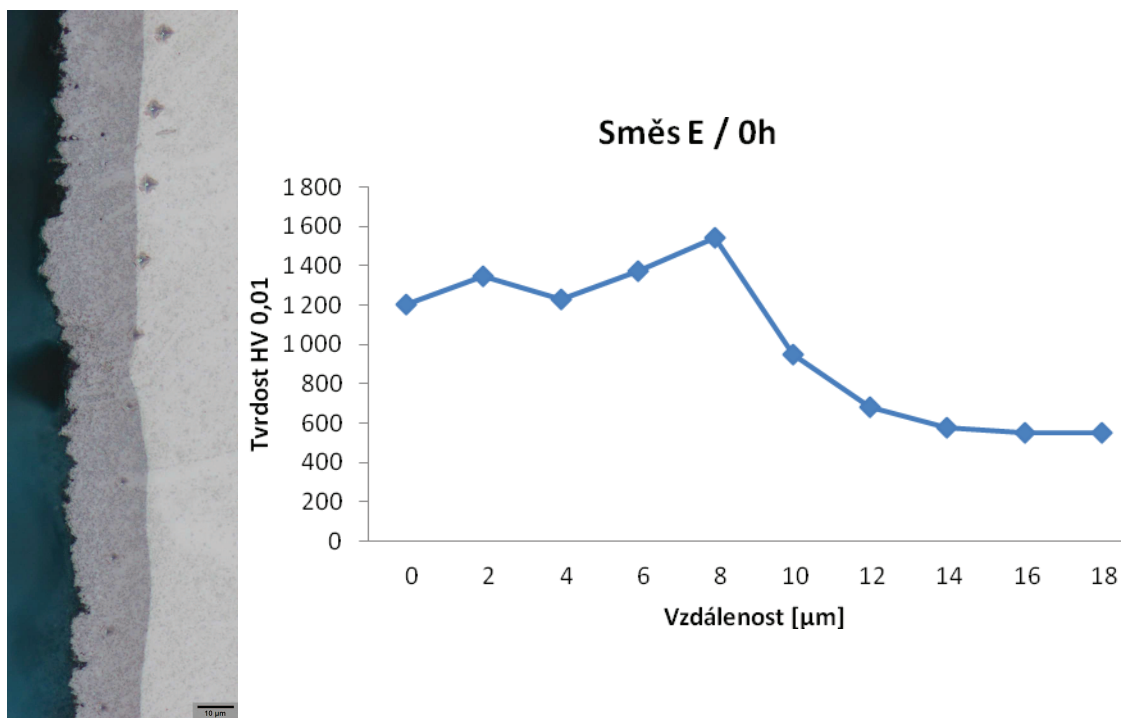
Obr. P.2.12 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs D po difuzním žíhání 5h.

Směs E

E / 0h

Tab. P.2.13 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi E po 0h.

| Směs E / 0h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 204 | HV 0,01 |
| 2 | 2 | 1 344 | HV 0,01 |
| 3 | 4 | 1 229 | HV 0,01 |
| 4 | 6 | 1 373 | HV 0,01 |
| 5 | 8 | 1 540 | HV 0,01 |
| 6 | 10 | 947 | HV 0,01 |
| 7 | 12 | 683 | HV 0,01 |
| 8 | 14 | 579 | HV 0,01 |
| 9 | 16 | 554 | HV 0,01 |
| 10 | 18 | 554 | HV 0,01 |

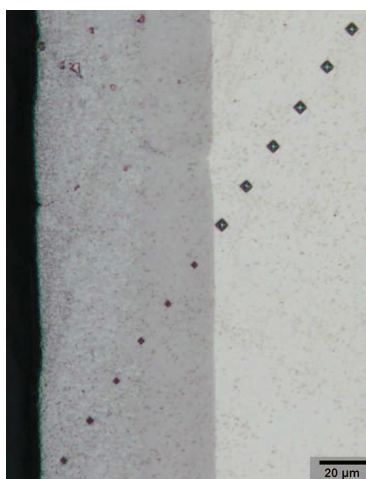


Obr. P.2.13 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs E po difuzním žíhání 0h.

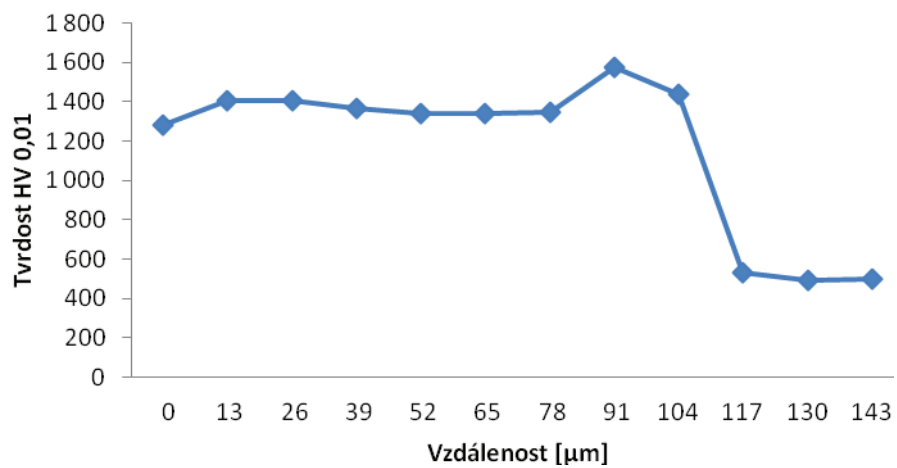
E / 2h

Tab. P.1.14 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi E po 2h.

| Směs E / 2h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 281 | HV 0,01 |
| 2 | 13 | 1 403 | HV 0,01 |
| 3 | 26 | 1 403 | HV 0,01 |
| 4 | 39 | 1 369 | HV 0,01 |
| 5 | 52 | 1 340 | HV 0,01 |
| 6 | 65 | 1 340 | HV 0,01 |
| 7 | 78 | 1 344 | HV 0,01 |
| 8 | 91 | 1 576 | HV 0,01 |
| 9 | 104 | 1 435 | HV 0,01 |
| 10 | 117 | 532 | HV 0,01 |
| 11 | 130 | 496 | HV 0,01 |
| 12 | 143 | 502 | HV 0,01 |



Směs E / 2h

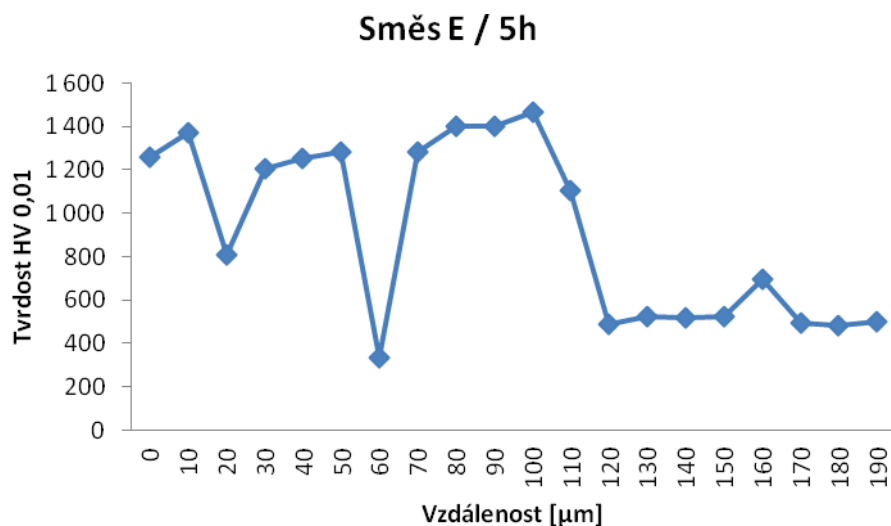
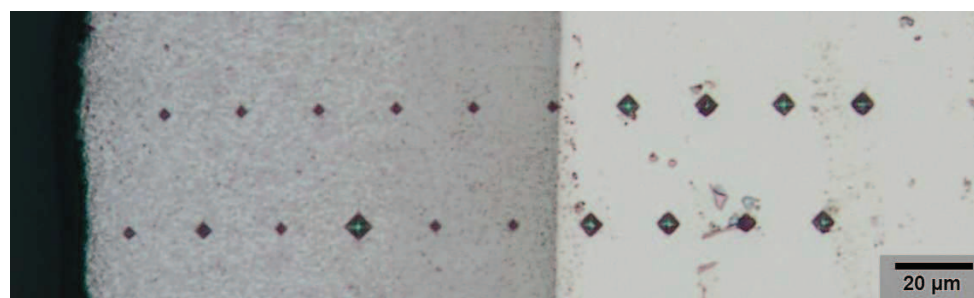


Obr. P.2.14 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs E po difuzním žhání 2h.

E / 5h

Tab. P.2.15 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi E po 5h.

| Směs E / 5h | | | | | | | |
|-------------|------------------------------|---------|---------|-----|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | | Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 258 | HV 0,01 | 11 | 100 | 1 467 | HV 0,01 |
| 2 | 10 | 1 369 | HV 0,01 | 12 | 110 | 1 106 | HV 0,01 |
| 3 | 20 | 808 | HV 0,01 | 13 | 120 | 489 | HV 0,01 |
| 4 | 30 | 1 204 | HV 0,01 | 14 | 130 | 524 | HV 0,01 |
| 5 | 40 | 1 254 | HV 0,01 | 15 | 140 | 517 | HV 0,01 |
| 6 | 50 | 1 281 | HV 0,01 | 16 | 150 | 524 | HV 0,01 |
| 7 | 60 | 335 | HV 0,01 | 17 | 160 | 695 | HV 0,01 |
| 8 | 70 | 1 284 | HV 0,01 | 18 | 170 | 496 | HV 0,01 |
| 9 | 80 | 1 403 | HV 0,01 | 19 | 180 | 482 | HV 0,01 |
| 10 | 90 | 1 403 | HV 0,01 | 20 | 190 | 502 | HV 0,01 |



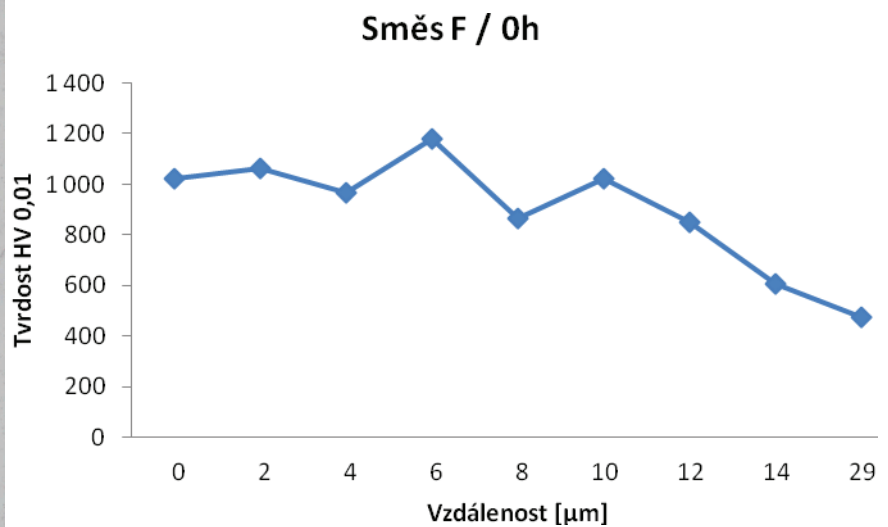
Obr. P.2.15 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs E po difuzním žhání 5h.

Směs F

F / 0h

Tab. P.2.16 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi F po 0h.

| Směs F / 0h | | | |
|-------------|------------------------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 024 | HV 0,01 |
| 2 | 2 | 1 064 | HV 0,01 |
| 3 | 4 | 967 | HV 0,01 |
| 4 | 6 | 1 177 | HV 0,01 |
| 5 | 8 | 865 | HV 0,01 |
| 6 | 10 | 1 022 | HV 0,01 |
| 7 | 12 | 850 | HV 0,01 |
| 8 | 14 | 605 | HV 0,01 |
| 9 | 29 | 476 | HV 0,01 |

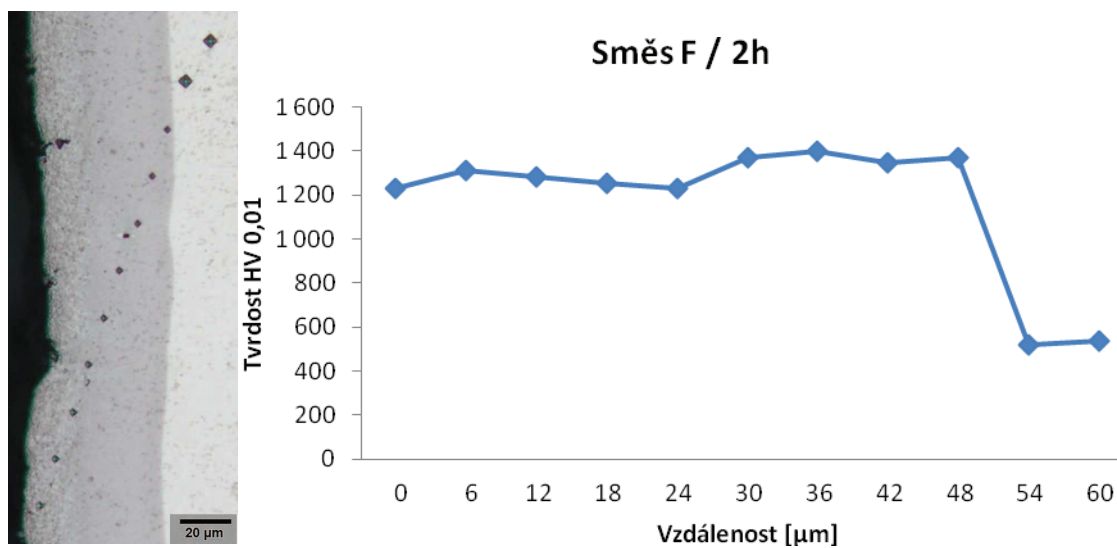


Obr. P.2.16 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs F po difuzním žhání 0h.

F / 2h

Tab. P.2.17 Výsledky měření mikrotvrdomosti vrstev vytvořených pomocí směsi F po 2h.

| Směs F / 2h | | | |
|-------------|------------------------------|-----------|---------|
| Bod | Vzdálenost [μm] | Tvrdomost | |
| 1 | 0 | 1 229 | HV 0,01 |
| 2 | 6 | 1 312 | HV 0,01 |
| 3 | 12 | 1 284 | HV 0,01 |
| 4 | 18 | 1 254 | HV 0,01 |
| 5 | 24 | 1 232 | HV 0,01 |
| 6 | 30 | 1 369 | HV 0,01 |
| 7 | 36 | 1 400 | HV 0,01 |
| 8 | 42 | 1 344 | HV 0,01 |
| 9 | 48 | 1 369 | HV 0,01 |
| 10 | 54 | 517 | HV 0,01 |
| 11 | 60 | 539 | HV 0,01 |

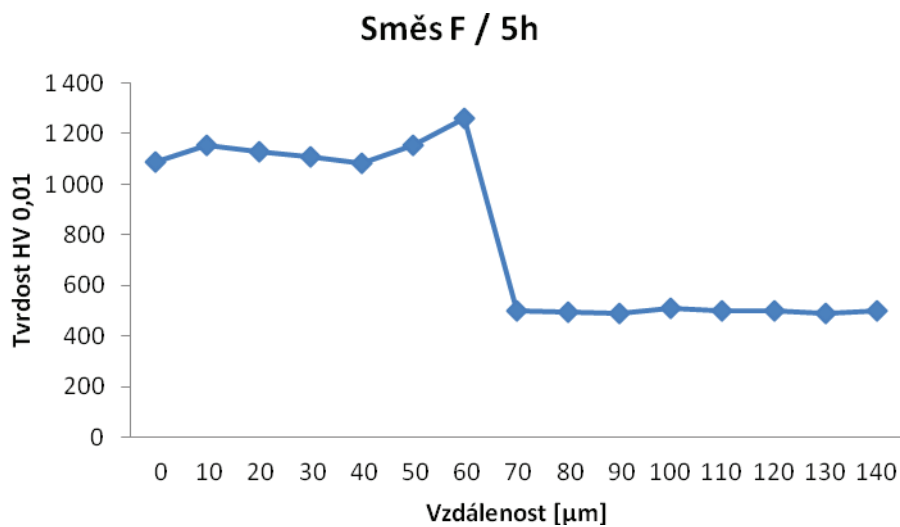
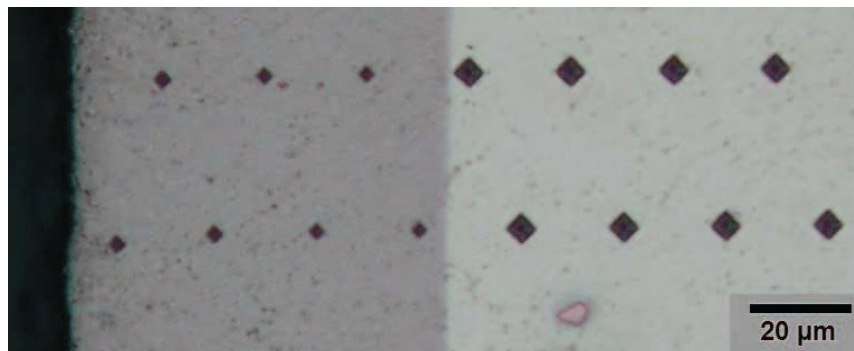


Obr. P.2.17 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs F po difuzním žíhání 2h.

F / 5h

Tab. P.2.18 Výsledky měření mikrotvrdosti vrstev vytvořených pomocí směsi F po 5h.

| Směs F / 5h | | | |
|-------------|-----------------|---------|---------|
| Bod | Vzdálenost [μm] | Tvrdost | |
| 1 | 0 | 1 087 | HV 0,01 |
| 2 | 10 | 1 153 | HV 0,01 |
| 3 | 20 | 1 131 | HV 0,01 |
| 4 | 30 | 1 106 | HV 0,01 |
| 5 | 40 | 1 085 | HV 0,01 |
| 6 | 50 | 1 153 | HV 0,01 |
| 7 | 60 | 1 258 | HV 0,01 |
| 8 | 70 | 502 | HV 0,01 |
| 9 | 80 | 495 | HV 0,01 |
| 10 | 90 | 489 | HV 0,01 |
| 11 | 100 | 510 | HV 0,01 |
| 12 | 110 | 502 | HV 0,01 |
| 13 | 120 | 502 | HV 0,01 |
| 14 | 130 | 489 | HV 0,01 |
| 15 | 140 | 502 | HV 0,01 |



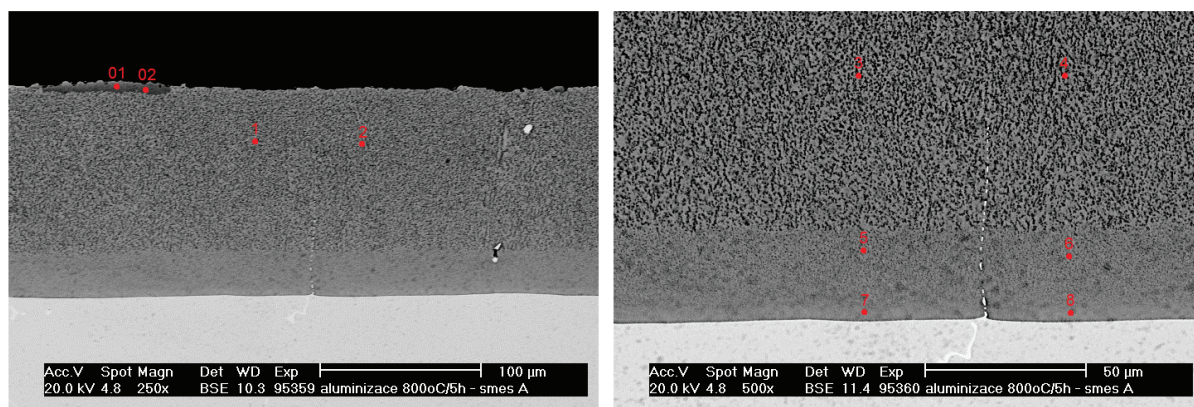
Obr. P.2.18 Závislost tvrdosti difuzní vrstvy na vzdálenosti pro směs F po difuzním žíhání 5h.

PŘÍLOHA 3: Výsledky chemické mikroanalýzy

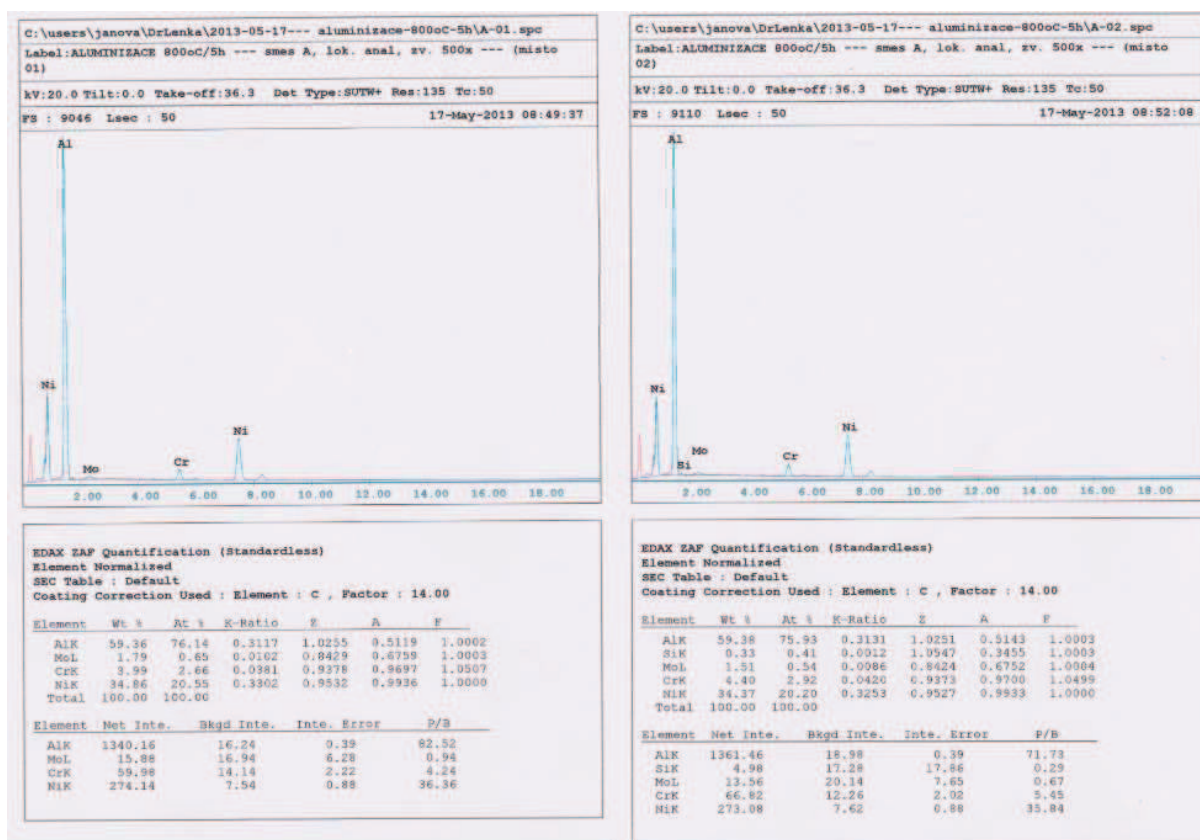
Měření lokální chemické mikroanalýzy bylo provedeno na vzorcích ze série po difuzním žíhání 5h, pomocí rastrovacího elektronového mikroskopu Philips XL30 vybaveném spektrometrem pro lokální chemickou analýzu EDS.

A / 5h

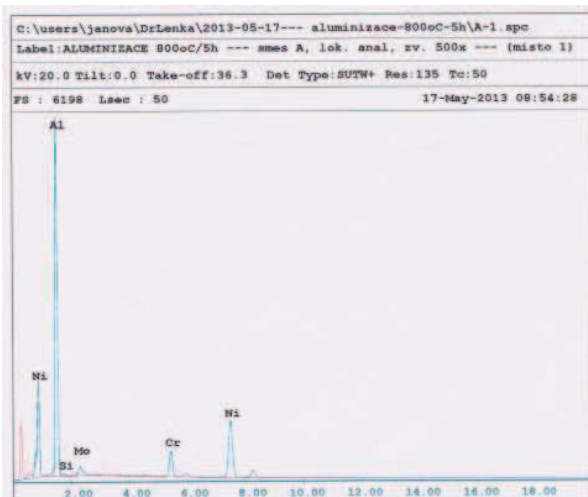
Směs A



Obr. P.3.1 Snímek difuzní vrstvy připravené ze směsi A s analyzovanými místy, REM.



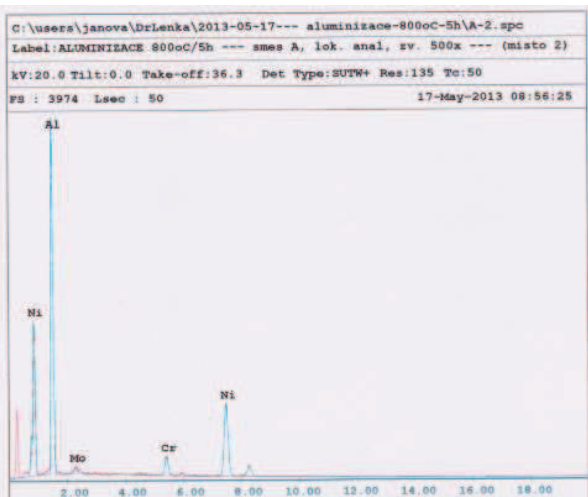
Obr. P.3.2 Výsledky lokální chemické mikroanalýzy EDS místa 01 a 02 na vzorku A.



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 51.53 | 69.68 | 0.2553 | 1.0320 | 0.4797 | 1.0006 |
| SiK | 0.60 | 0.78 | 0.0023 | 1.0618 | 0.3571 | 1.0007 |
| MoL | 3.42 | 1.30 | 0.0291 | 0.8496 | 0.6896 | 1.0006 |
| CrK | 7.49 | 5.19 | 0.0738 | 0.9447 | 0.9689 | 1.0496 |
| NiK | 36.76 | 22.84 | 0.3494 | 0.9608 | 0.9893 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

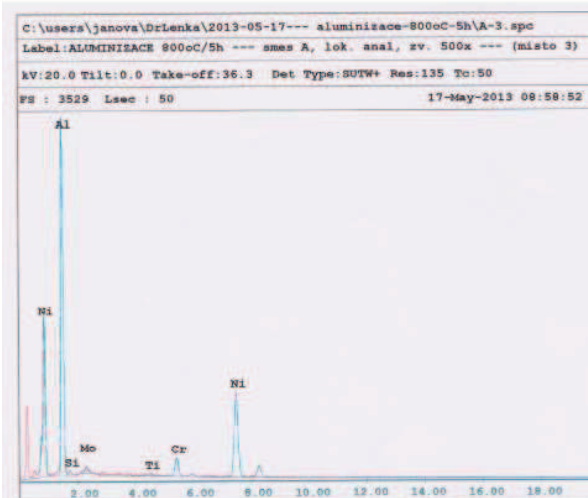
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 918.46 | 12.90 | 6.47 | 71.20 |
| SiK | 7.72 | 10.94 | 9.97 | 0.71 |
| MoL | 26.14 | 15.54 | 4.09 | 1.68 |
| CrK | 97.16 | 11.68 | 1.60 | 8.32 |
| NiK | 242.70 | 6.72 | 0.93 | 36.12 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 49.56 | 68.25 | 0.2318 | 1.0324 | 0.4530 | 1.0003 |
| MoL | 2.38 | 0.92 | 0.0139 | 0.8503 | 0.6861 | 1.0004 |
| CrK | 5.05 | 3.81 | 0.0492 | 0.9453 | 0.9701 | 1.0612 |
| NiK | 43.01 | 27.22 | 0.4105 | 0.9615 | 0.9525 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

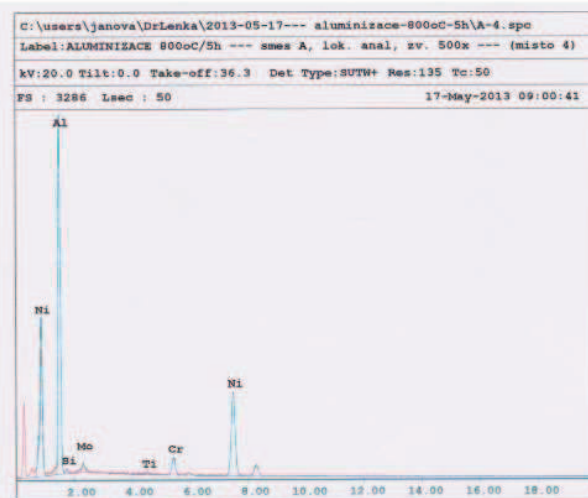
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 587.90 | 9.80 | 0.59 | 59.99 |
| MoL | 12.78 | 13.04 | 6.90 | 0.98 |
| CrK | 45.58 | 7.64 | 2.42 | 5.97 |
| NiK | 200.96 | 5.20 | 1.02 | 39.65 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 47.51 | 66.07 | 0.2184 | 1.0328 | 0.4448 | 1.0004 |
| SiK | 0.70 | 0.94 | 0.0027 | 1.0626 | 0.3548 | 1.0005 |
| MoL | 2.21 | 0.86 | 0.0129 | 0.8509 | 0.6863 | 1.0004 |
| TiK | 0.46 | 0.36 | 0.0042 | 0.9481 | 0.9344 | 1.0329 |
| CrK | 4.50 | 3.25 | 0.0438 | 0.9458 | 0.9694 | 1.0634 |
| NiK | 44.61 | 28.51 | 0.4262 | 0.9622 | 0.9928 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 522.68 | 8.80 | 0.63 | 59.40 |
| SiK | 5.98 | 7.92 | 11.05 | 0.76 |
| MoL | 11.18 | 13.22 | 7.76 | 0.85 |
| TiK | 4.82 | 8.64 | 13.79 | 0.36 |
| CrK | 38.38 | 7.72 | 2.70 | 4.97 |
| NiK | 196.96 | 4.64 | 1.63 | 42.45 |

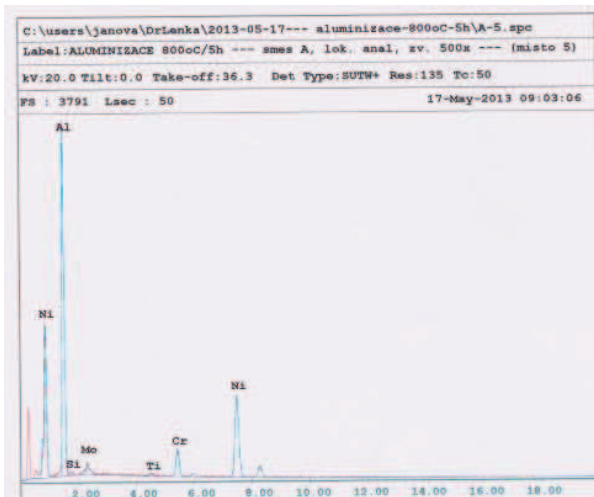


EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 47.01 | 65.70 | 0.2158 | 1.0325 | 0.4440 | 1.0005 |
| SiK | 0.75 | 1.00 | 0.0028 | 1.0633 | 0.3561 | 1.0006 |
| MoL | 2.76 | 1.09 | 0.0162 | 0.8517 | 0.6877 | 1.0004 |
| TiK | 0.47 | 0.37 | 0.0043 | 0.9488 | 0.9333 | 1.0323 |
| CrK | 4.33 | 3.14 | 0.0422 | 0.9466 | 0.9686 | 1.0631 |
| NiK | 44.68 | 28.70 | 0.4271 | 0.9630 | 0.9927 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 491.38 | 6.86 | 0.65 | 71.63 |
| SiK | 6.04 | 7.44 | 10.73 | 0.81 |
| MoL | 13.36 | 11.22 | 6.33 | 1.19 |
| TiK | 4.88 | 7.28 | 13.25 | 0.64 |
| CrK | 35.18 | 6.42 | 2.79 | 5.48 |
| NiK | 187.78 | 3.50 | 1.05 | 48.15 |

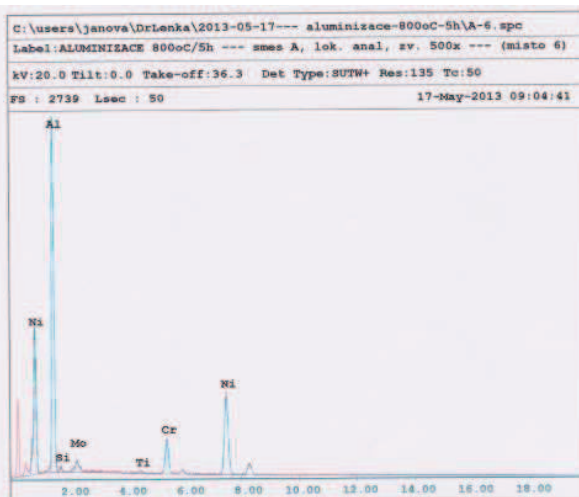
Obr. P.3.3 Výsledky lokální chemické mikroanalýzy EDS místa 1,2,3 a 4 na vzorku A.



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 45.38 | 64.25 | 0.2073 | 1.0357 | 0.4413 | 1.0005 |
| SiK | 0.66 | 0.90 | 0.0023 | 1.0656 | 0.3600 | 1.0007 |
| MoL | 3.42 | 1.36 | 0.0203 | 0.8538 | 0.6933 | 1.0006 |
| TiK | 0.49 | 0.35 | 0.0045 | 0.9509 | 0.9330 | 1.0343 |
| CrK | 6.33 | 4.85 | 0.0616 | 0.3488 | 0.9683 | 1.0598 |
| NiK | 43.72 | 28.45 | 0.4180 | 0.9654 | 0.9904 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

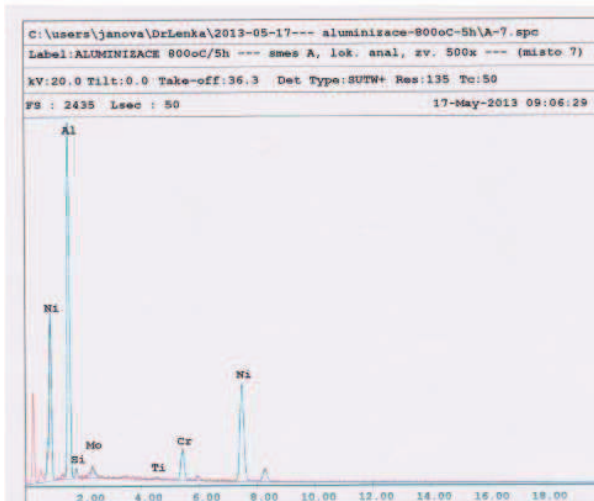
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 555.14 | 8.90 | 0.61 | 62.38 |
| SiK | 6.40 | 8.90 | 10.87 | 0.72 |
| MoL | 19.64 | 12.82 | 4.80 | 1.58 |
| TiK | 5.68 | 9.94 | 12.59 | 0.57 |
| CrK | 60.26 | 8.60 | 2.07 | 7.01 |
| NiK | 215.90 | 6.18 | 0.99 | 34.94 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 45.25 | 64.01 | 0.2089 | 1.0362 | 0.4454 | 1.0006 |
| SiK | 0.76 | 1.03 | 0.0029 | 1.0661 | 0.3623 | 1.0008 |
| MoL | 3.56 | 1.42 | 0.0212 | 0.8542 | 0.6958 | 1.0007 |
| TiK | 0.53 | 0.42 | 0.0049 | 0.9516 | 0.9333 | 1.0356 |
| CrK | 7.96 | 5.84 | 0.0772 | 0.3492 | 0.9684 | 1.0558 |
| NiK | 41.94 | 27.27 | 0.4005 | 0.9658 | 0.9887 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

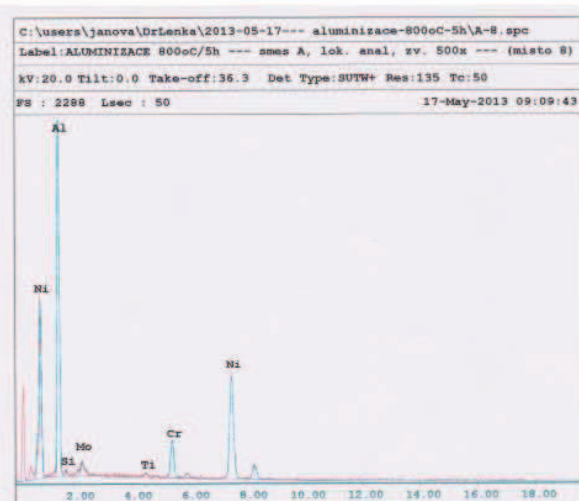
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 405.82 | 7.80 | 0.72 | 52.03 |
| SiK | 5.34 | 7.36 | 11.83 | 0.73 |
| MoL | 14.90 | 9.02 | 5.45 | 1.65 |
| TiK | 4.50 | 6.76 | 13.34 | 0.67 |
| CrK | 54.86 | 6.14 | 2.11 | 8.93 |
| NiK | 150.18 | 3.52 | 1.18 | 42.66 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 42.86 | 61.54 | 0.1917 | 1.0365 | 0.4311 | 1.0007 |
| SiK | 1.38 | 1.90 | 0.0053 | 1.0664 | 0.3631 | 1.0007 |
| MoL | 3.32 | 1.34 | 0.0197 | 0.8548 | 0.6939 | 1.0006 |
| TiK | 0.48 | 0.39 | 0.0045 | 0.9519 | 0.9334 | 1.0354 |
| CrK | 6.36 | 4.74 | 0.0622 | 0.3498 | 0.9685 | 1.0621 |
| NiK | 45.59 | 30.08 | 0.4364 | 0.9665 | 0.9904 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 372.94 | 7.40 | 0.75 | 50.34 |
| SiK | 8.74 | 6.84 | 7.83 | 1.42 |
| MoL | 13.88 | 9.12 | 5.77 | 1.52 |
| TiK | 4.10 | 7.54 | 15.11 | 0.54 |
| CrK | 44.18 | 6.48 | 2.42 | 6.82 |
| NiK | 163.76 | 3.52 | 1.13 | 46.52 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

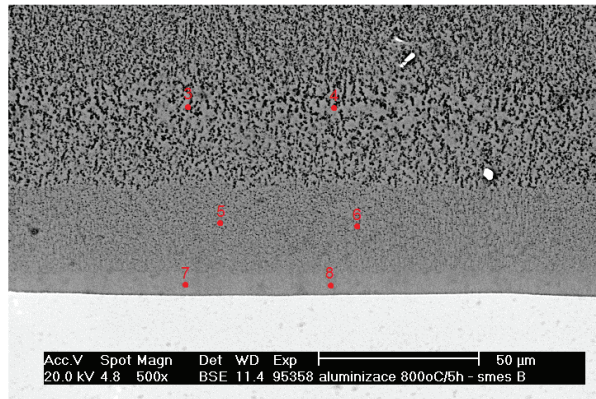
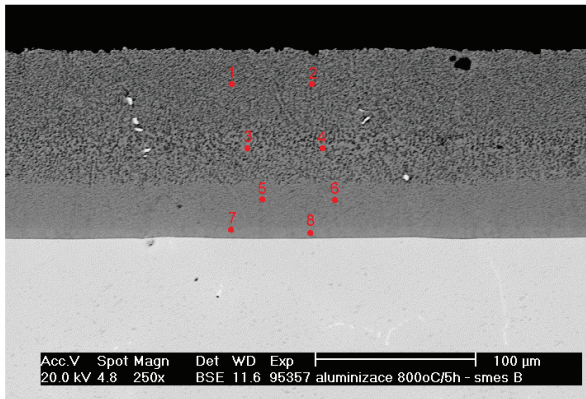
| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 41.22 | 60.22 | 0.1818 | 1.0350 | 0.4243 | 1.0006 |
| SiK | 0.79 | 1.10 | 0.0031 | 1.0689 | 0.3649 | 1.0008 |
| MoL | 3.86 | 1.59 | 0.0232 | 0.8573 | 0.6993 | 1.0007 |
| TiK | 0.65 | 0.53 | 0.0060 | 0.9543 | 0.9333 | 1.0370 |
| CrK | 7.57 | 5.73 | 0.0740 | 0.3523 | 0.9681 | 1.0610 |
| NiK | 45.91 | 30.62 | 0.4401 | 0.9652 | 0.9889 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 347.92 | 7.29 | 0.77 | 48.32 |
| SiK | 5.52 | 6.48 | 11.01 | 0.85 |
| MoL | 16.06 | 8.10 | 5.00 | 1.98 |
| TiK | 5.44 | 7.02 | 11.47 | 0.77 |
| CrK | 51.78 | 6.38 | 2.19 | 8.12 |
| NiK | 162.56 | 4.64 | 1.14 | 35.03 |

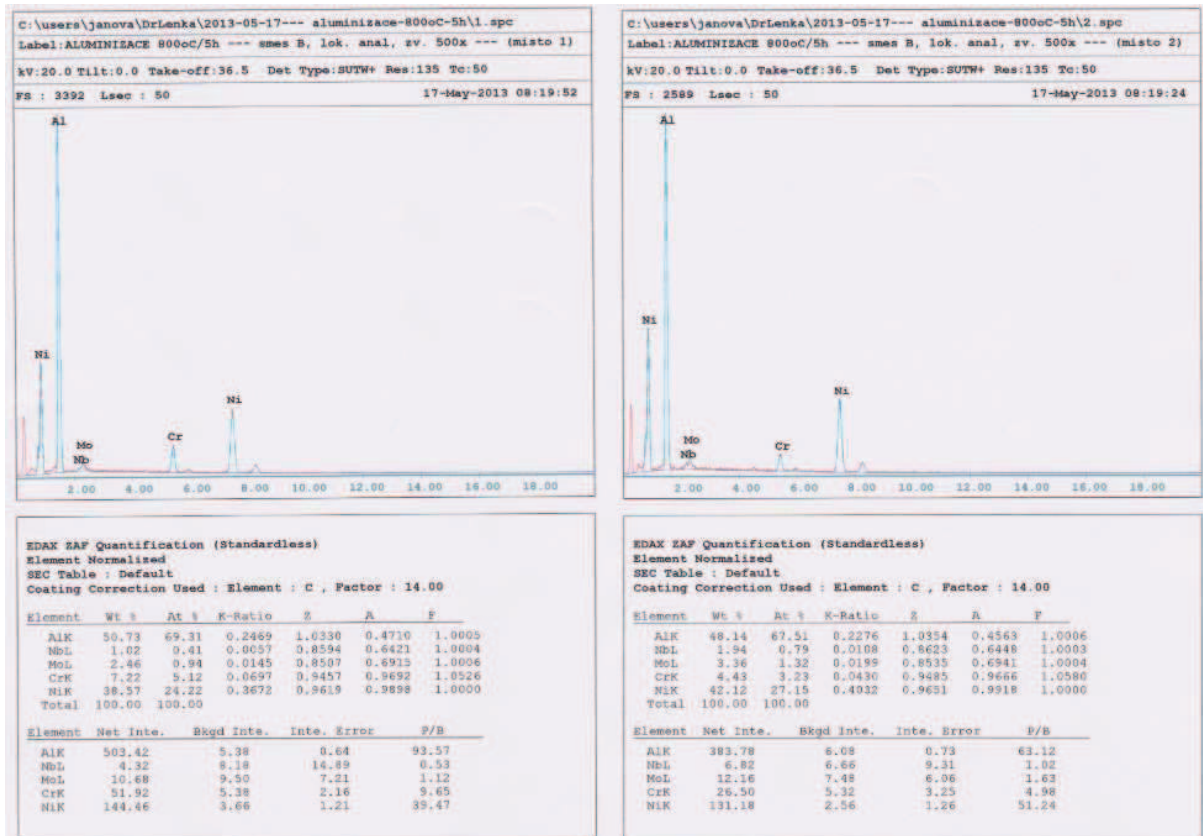
Obr. P.3.4 Výsledky lokální chemické mikroanalýzy EDS místa 5, 6, 7 a 8 na vzorku A.

B / 5h

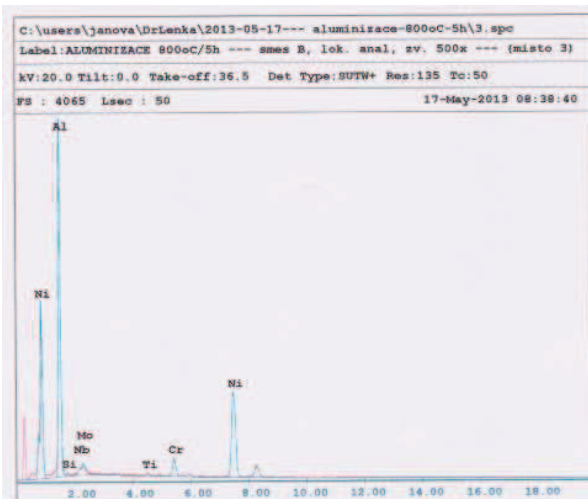
Směs B



Obr. P.3.5 Snímek difuzní vrstvy připravené ze směsi B s analyzovanými místy, REM.



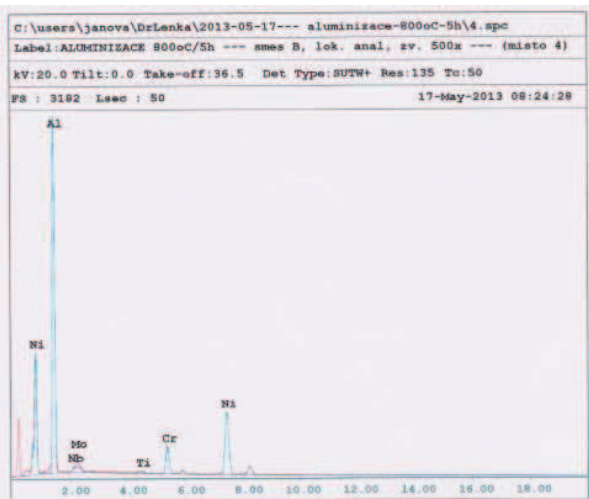
Obr. P.3.6 Výsledky lokální chemické mikroanalýzy EDS místa 1 a 2 na vzorku B.



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 45.27 | 64.62 | 0.2081 | 1.0368 | 0.4431 | 1.0007 |
| SiK | 0.45 | 0.62 | 0.0017 | 1.0667 | 0.3618 | 1.0010 |
| NbL | 2.07 | 0.86 | 0.0116 | 0.9638 | 0.6468 | 1.0003 |
| MoL | 3.11 | 1.25 | 0.0185 | 0.8551 | 0.6961 | 1.0004 |
| TiK | 0.62 | 0.50 | 0.0057 | 0.9522 | 0.9293 | 1.0310 |
| CrK | 4.12 | 3.05 | 0.0401 | 0.9501 | 0.9657 | 1.0607 |
| NiK | 44.35 | 29.10 | 0.4253 | 0.9668 | 0.9917 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

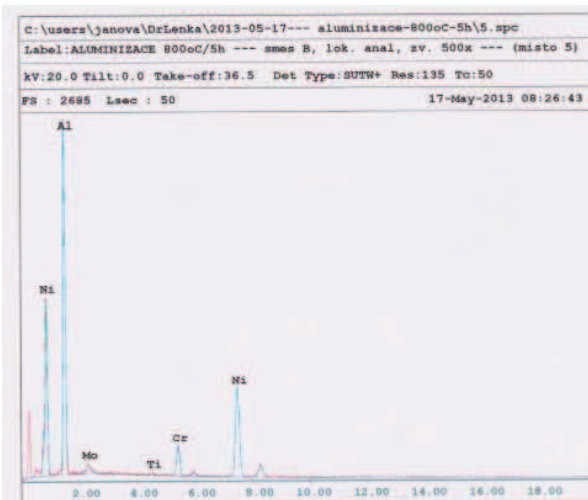
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 609.14 | 6.80 | 0.58 | 89.88 |
| SiK | 4.80 | 7.40 | 13.04 | 9.65 |
| NbL | 12.70 | 10.14 | 8.39 | 1.25 |
| MoL | 19.64 | 11.70 | 4.72 | 1.68 |
| TiK | 7.90 | 9.10 | 9.15 | 0.87 |
| CrK | 42.92 | 9.52 | 2.59 | 4.51 |
| NiK | 240.14 | 5.74 | 0.93 | 41.84 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 48.94 | 68.02 | 0.2389 | 1.0399 | 0.4710 | 1.0007 |
| NbL | 1.84 | 0.74 | 0.0193 | 0.8624 | 0.6500 | 1.0005 |
| MoL | 3.66 | 1.43 | 0.0219 | 0.8537 | 0.6991 | 1.0007 |
| TiK | 0.60 | 0.47 | 0.0054 | 0.9510 | 0.9282 | 1.0316 |
| CrK | 7.41 | 5.34 | 0.0712 | 0.9488 | 0.9657 | 1.0491 |
| NiK | 37.56 | 24.00 | 0.3583 | 0.9653 | 0.9882 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

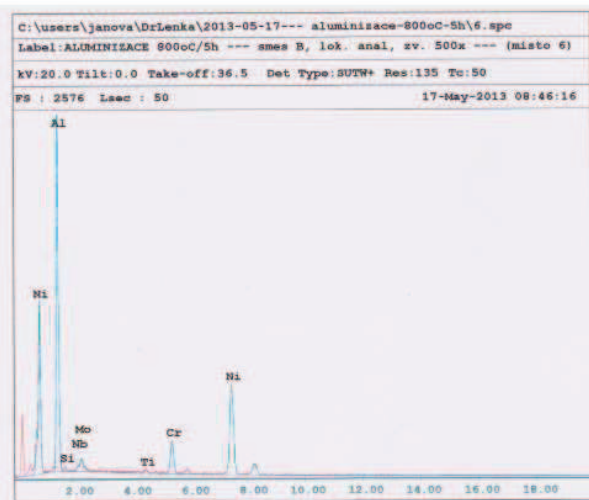
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 472.08 | 6.56 | 0.66 | 71.96 |
| NbL | 7.63 | 7.36 | 8.76 | 1.34 |
| MoL | 15.66 | 8.34 | 5.14 | 1.88 |
| TiK | 5.08 | 6.76 | 12.01 | 0.75 |
| CrK | 51.40 | 6.18 | 2.20 | 8.32 |
| NiK | 136.60 | 3.32 | 1.24 | 41.14 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 44.12 | 63.29 | 0.1973 | 1.0369 | 0.4310 | 1.0004 |
| MoL | 3.04 | 1.23 | 0.0181 | 0.8551 | 0.6955 | 1.0006 |
| TiK | 0.45 | 0.36 | 0.0042 | 0.9522 | 0.9348 | 1.0363 |
| CrK | 6.71 | 5.00 | 0.0677 | 0.9501 | 0.9694 | 1.0625 |
| NiK | 45.67 | 30.12 | 0.4373 | 0.9668 | 0.9904 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 395.14 | 7.32 | 0.72 | 53.98 |
| MoL | 13.14 | 9.52 | 6.11 | 1.38 |
| TiK | 3.94 | 7.10 | 15.29 | 0.55 |
| CrK | 48.10 | 5.84 | 2.27 | 8.24 |
| NiK | 169.02 | 3.52 | 1.11 | 48.02 |

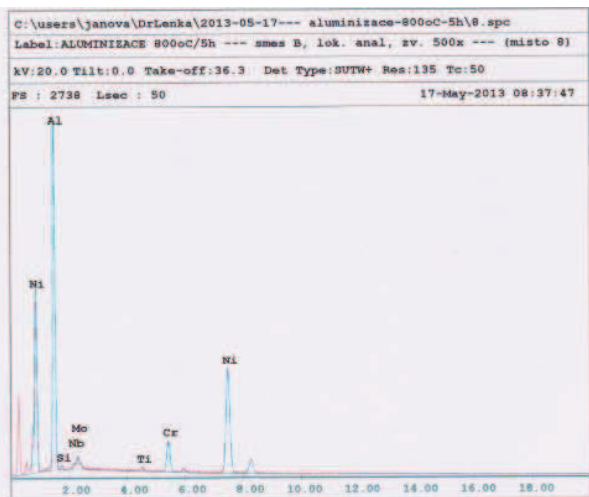
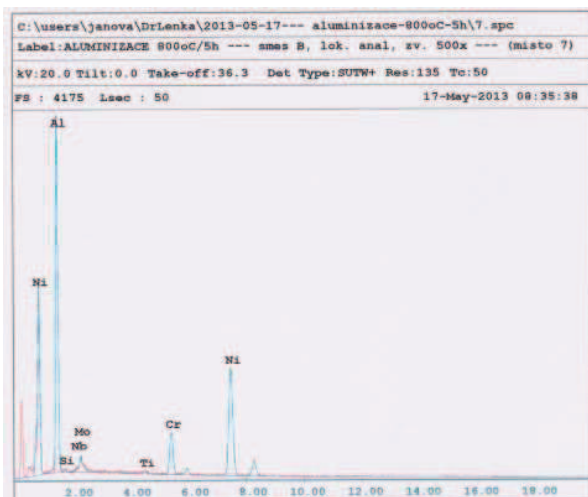


EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 43.57 | 62.73 | 0.1991 | 1.0382 | 0.4397 | 1.0007 |
| SiK | 0.57 | 0.79 | 0.0022 | 1.0682 | 0.3655 | 1.0010 |
| NbL | 1.50 | 0.63 | 0.0084 | 0.8631 | 0.6513 | 1.0005 |
| MoL | 3.23 | 1.31 | 0.0194 | 0.8564 | 0.7005 | 1.0007 |
| TiK | 0.64 | 0.52 | 0.0059 | 0.9535 | 0.9316 | 1.0349 |
| CrK | 7.39 | 5.52 | 0.0718 | 0.9514 | 0.9670 | 1.0569 |
| NiK | 43.10 | 28.51 | 0.4126 | 0.9683 | 0.9887 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 391.28 | 7.68 | 0.73 | 50.55 |
| SiK | 4.10 | 7.20 | 14.84 | 0.57 |
| NbL | 6.22 | 8.20 | 10.81 | 0.76 |
| MoL | 12.82 | 9.92 | 5.78 | 1.33 |
| TiK | 5.50 | 6.22 | 10.89 | 0.88 |
| CrK | 51.60 | 5.32 | 2.16 | 9.70 |
| NiK | 156.46 | 3.84 | 1.16 | 40.74 |

Obr. P.3.7 Výsledky lokální chemické mikroanalýzy EDS místa 3, 4, 5 a 6 na vzorku B.



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 39.92 | 59.16 | 0.1742 | 1.0489 | 0.4190 | 1.0006 |
| SiK | 0.41 | 0.59 | 0.0016 | 1.9708 | 0.3665 | 1.0009 |
| NbL | 0.94 | 0.41 | 0.0054 | 0.8679 | 0.8539 | 1.0006 |
| MoL | 3.54 | 1.48 | 0.0214 | 0.8591 | 0.7031 | 1.0007 |
| TiK | 0.42 | 0.25 | 0.0039 | 0.9562 | 0.9328 | 1.0381 |
| CrK | 8.23 | 6.33 | 0.0807 | 0.9542 | 0.9682 | 1.0612 |
| NiK | 46.52 | 31.68 | 0.4465 | 0.9713 | 0.9883 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 624.60 | 13.96 | 0.58 | 44.74 |
| SiK | 5.48 | 13.20 | 14.37 | 0.42 |
| NbL | 7.21 | 15.20 | 12.04 | 0.47 |
| MoL | 27.80 | 16.84 | 3.99 | 1.65 |
| TiK | 6.68 | 13.06 | 12.12 | 0.51 |
| CrK | 105.82 | 11.12 | 1.51 | 9.52 |
| NiK | 305.06 | 7.18 | 0.82 | 43.04 |

EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

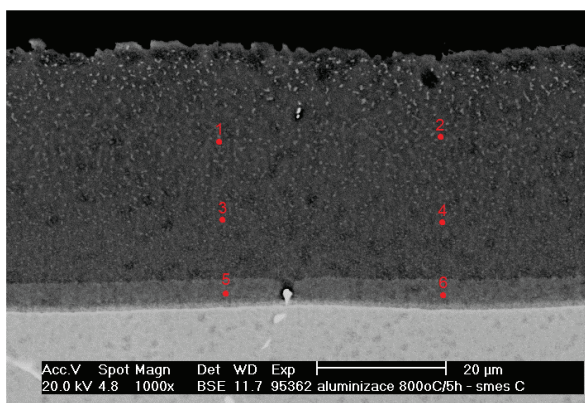
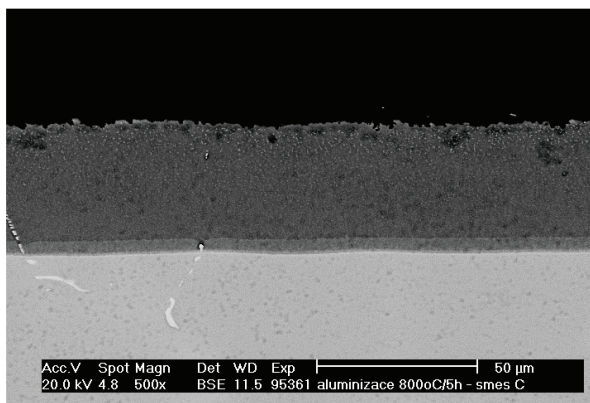
| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 40.76 | 60.00 | 0.1778 | 1.0394 | 0.4195 | 1.0006 |
| SiK | 0.51 | 0.72 | 0.0020 | 1.0694 | 0.3640 | 1.0009 |
| NbL | 1.37 | 0.58 | 0.0077 | 0.8666 | 0.6501 | 1.0005 |
| MoL | 2.83 | 1.17 | 0.0170 | 0.8579 | 0.6994 | 1.0006 |
| TiK | 0.57 | 0.47 | 0.0052 | 0.9549 | 0.9326 | 1.0362 |
| CrK | 6.33 | 4.84 | 0.0621 | 0.9529 | 0.9678 | 1.0643 |
| NiK | 47.63 | 32.22 | 0.4574 | 0.9699 | 0.9902 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 394.64 | 8.84 | 0.73 | 44.64 |
| SiK | 4.14 | 8.70 | 15.85 | 0.48 |
| NbL | 6.41 | 10.64 | 11.61 | 0.60 |
| MoL | 13.66 | 11.96 | 6.35 | 1.14 |
| TiK | 5.52 | 8.58 | 12.20 | 0.64 |
| CrK | 50.42 | 7.56 | 2.27 | 6.67 |
| NiK | 195.92 | 4.16 | 1.93 | 47.10 |

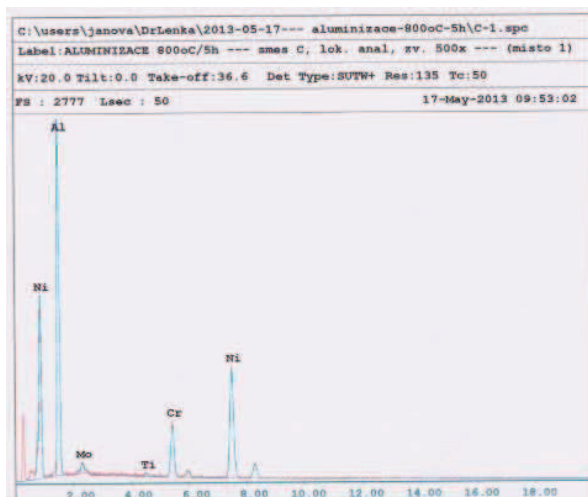
Obr. P.3.8 Výsledky lokální chemické mikroanalýzy EDS místa 7, 8 na vzorku B.

C / 5h

Směs C



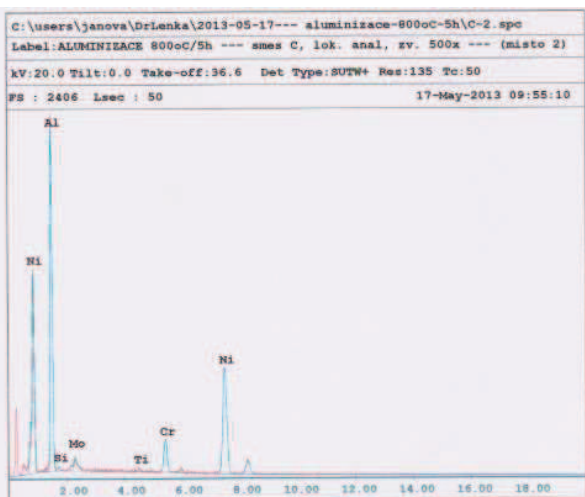
Obr. P.3.9 Snímek difuzní vrstvy připravené ze směsi C s analyzovanými místy, REM.



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 39.92 | 58.99 | 0.1730 | 1.0403 | 0.4163 | 1.0004 |
| MoL | 2.83 | 1.18 | 0.0171 | 0.8585 | 0.7035 | 1.0009 |
| TiK | 0.54 | 0.45 | 0.0050 | 0.9556 | 0.9372 | 1.0418 |
| CrK | 10.06 | 7.71 | 0.0948 | 0.9536 | 0.9707 | 1.0615 |
| NIK | 46.63 | 31.68 | 0.4479 | 0.9796 | 0.9873 | 1.0060 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/S |
|---------|-----------|------------|-------------|-------|
| AlK | 415.66 | 9.36 | 0.71 | 44.41 |
| MoL | 14.92 | 33.56 | 6.15 | 1.10 |
| TiK | 5.72 | 8.76 | 11.92 | 0.65 |
| CrK | 86.74 | 7.62 | 1.65 | 11.38 |
| NIK | 207.14 | 4.80 | 1.01 | 43.15 |

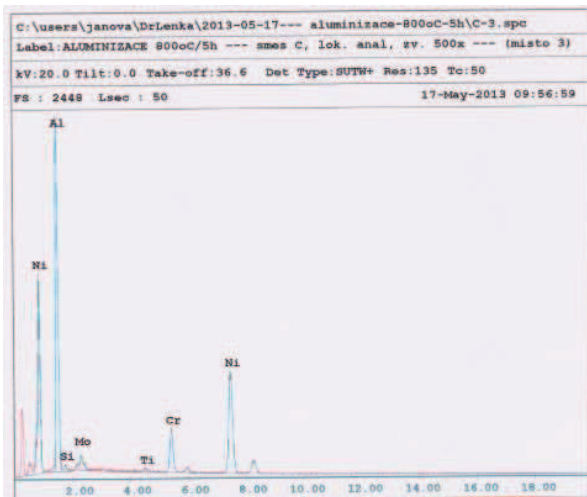


EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 40.30 | 59.42 | 0.1746 | 1.0392 | 0.4165 | 1.0005 |
| SiK | 0.58 | 0.82 | 0.0023 | 1.0692 | 0.3645 | 1.0007 |
| MoL | 3.58 | 1.49 | 0.0215 | 0.8577 | 0.4991 | 1.0006 |
| TiK | 0.45 | 0.39 | 0.0042 | 0.9547 | 0.9341 | 1.0374 |
| CrK | 6.55 | 5.01 | 0.0645 | 0.9527 | 0.9690 | 1.0661 |
| NIK | 48.54 | 32.89 | 0.4661 | 0.9697 | 0.9903 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/S |
|---------|-----------|------------|-------------|-------|
| AlK | 344.14 | 7.46 | 0.78 | 46.13 |
| SiK | 4.18 | 6.96 | 14.39 | 0.60 |
| MoL | 15.34 | 8.36 | 5.22 | 1.83 |
| TiK | 3.90 | 7.54 | 15.80 | 0.52 |
| CrK | 46.42 | 7.56 | 2.39 | 6.14 |
| NIK | 177.20 | 3.84 | 1.09 | 46.15 |

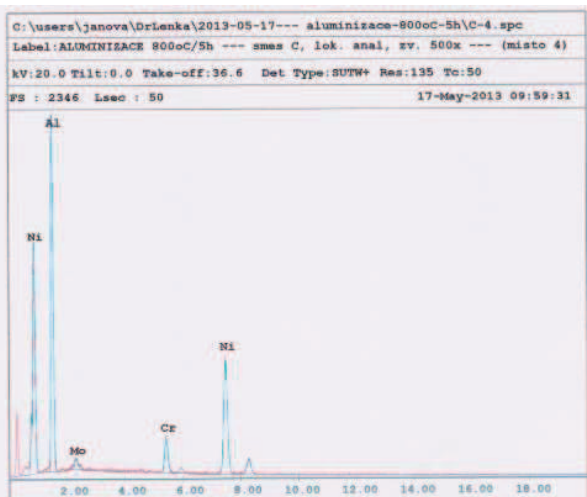
Obr. P.3.10 Výsledky lokální chemické mikroanalýzy EDS místa 1 a 2 na vzorku C.



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 40.36 | 59.37 | 0.1777 | 1.0399 | 0.4232 | 1.0007 |
| SiK | 0.78 | 1.10 | 0.0031 | 1.0688 | 0.3679 | 1.0009 |
| MoL | 4.09 | 1.69 | 0.0247 | 0.8582 | 0.7024 | 1.0007 |
| TiK | 0.60 | 0.50 | 0.0085 | 0.9552 | 0.9336 | 1.0379 |
| CrK | 8.18 | 6.24 | 0.0661 | 0.9532 | 0.9683 | 1.0607 |
| NiK | 45.99 | 31.10 | 0.4411 | 0.9702 | 0.9883 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

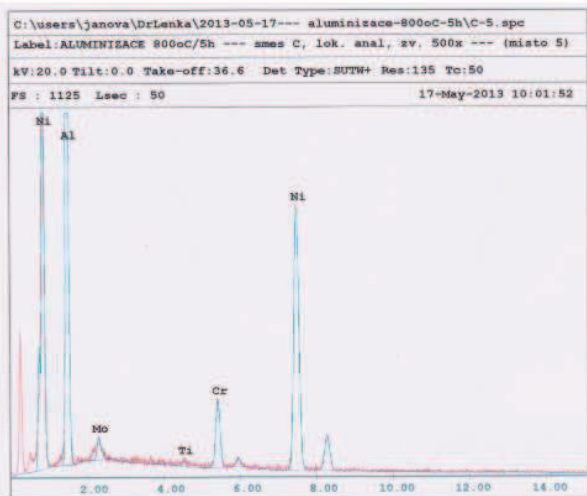
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 361.46 | 7.28 | 0.76 | 49.65 |
| SiK | 5.86 | 6.66 | 10.37 | 0.88 |
| MoL | 18.18 | 9.76 | 4.78 | 1.86 |
| TiK | 5.34 | 7.52 | 11.96 | 0.71 |
| CrK | 59.48 | 7.18 | 2.04 | 8.28 |
| NiK | 172.96 | 4.18 | 1.10 | 41.38 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 40.83 | 60.16 | 0.1753 | 1.0389 | 0.4132 | 1.0004 |
| MoL | 3.05 | 1.26 | 0.0182 | 0.8574 | 0.6975 | 1.0005 |
| CrK | 6.54 | 5.00 | 0.0646 | 0.9523 | 0.9706 | 1.0688 |
| NiK | 49.59 | 33.58 | 0.4763 | 0.9693 | 0.9910 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

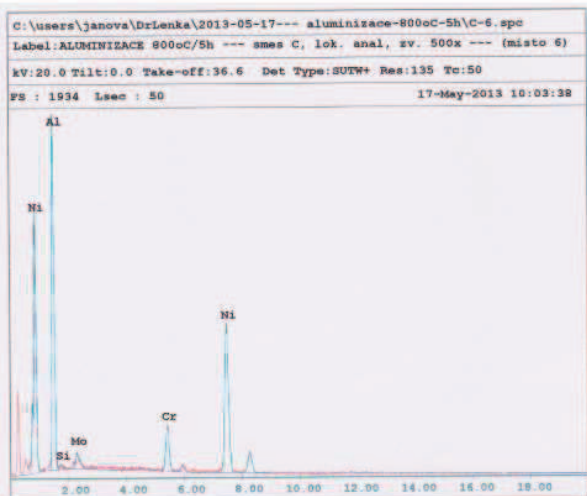
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 355.08 | 6.80 | 0.76 | 52.22 |
| MoL | 13.38 | 10.86 | 6.26 | 1.23 |
| CrK | 47.80 | 6.72 | 2.32 | 7.11 |
| NiK | 186.02 | 3.20 | 1.05 | 58.13 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 36.98 | 55.20 | 0.1470 | 1.0419 | 0.3908 | 1.0004 |
| MoL | 2.95 | 1.23 | 0.0172 | 0.8607 | 0.7009 | 1.0006 |
| TiK | 0.42 | 0.36 | 0.0039 | 0.9575 | 0.9365 | 1.0408 |
| CrK | 6.17 | 4.90 | 0.0619 | 0.9556 | 0.9705 | 1.0757 |
| NiK | 54.48 | 38.31 | 0.5255 | 0.9730 | 0.9913 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 296.70 | 6.32 | 0.84 | 46.95 |
| MoL | 12.60 | 18.52 | 6.51 | 1.20 |
| TiK | 3.74 | 6.94 | 15.87 | 0.54 |
| CrK | 45.38 | 6.20 | 2.37 | 7.32 |
| NiK | 204.56 | 3.64 | 1.01 | 56.20 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

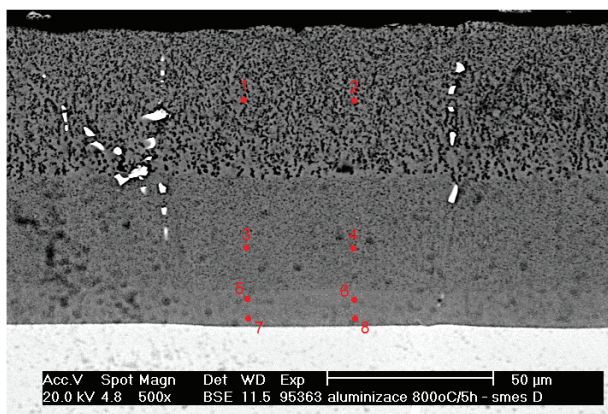
| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 35.19 | 54.98 | 0.1439 | 1.0426 | 0.3920 | 1.0005 |
| SiK | 0.57 | 0.84 | 0.0023 | 1.0726 | 0.3671 | 1.0007 |
| MoL | 3.47 | 1.50 | 0.0210 | 0.8614 | 0.7027 | 1.0006 |
| CrK | 7.18 | 5.73 | 0.0716 | 0.9564 | 0.9706 | 1.0733 |
| NiK | 53.59 | 37.85 | 0.5168 | 0.9738 | 0.9903 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 285.38 | 6.72 | 0.86 | 42.47 |
| SiK | 4.20 | 6.56 | 14.01 | 0.64 |
| MoL | 15.19 | 8.98 | 5.32 | 1.76 |
| CrK | 51.84 | 6.86 | 2.21 | 7.56 |
| NiK | 197.62 | 4.24 | 1.03 | 46.61 |

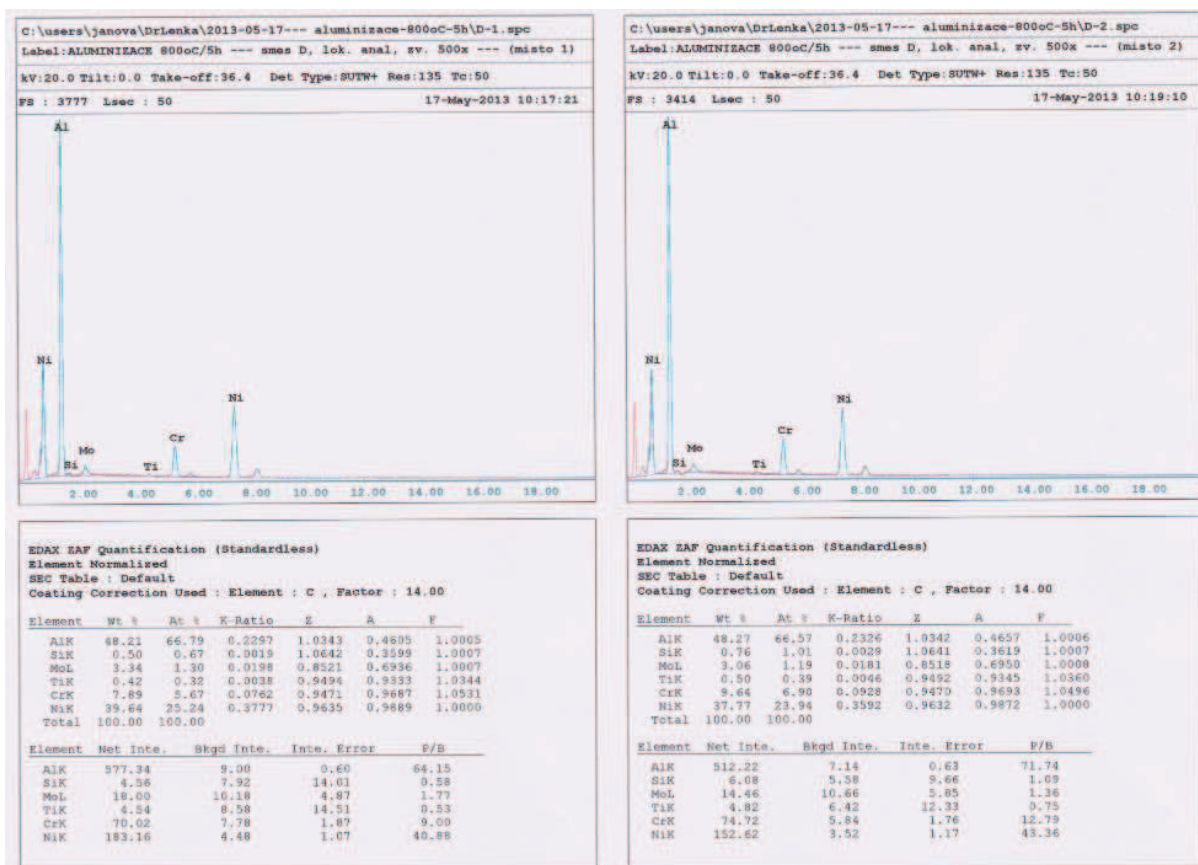
Obr. P.3.11 Výsledky lokální chemické mikroanalýzy EDS místa 3, 4, 5 a 6 na vzorku C.

D / 5h

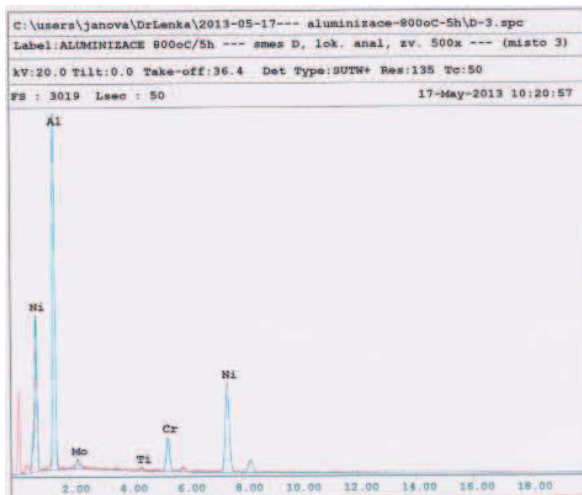
Směs D



Obr. P.3.12 Snímek difuzní vrstvy připravené ze směsi D s analyzovanými místy, REM.



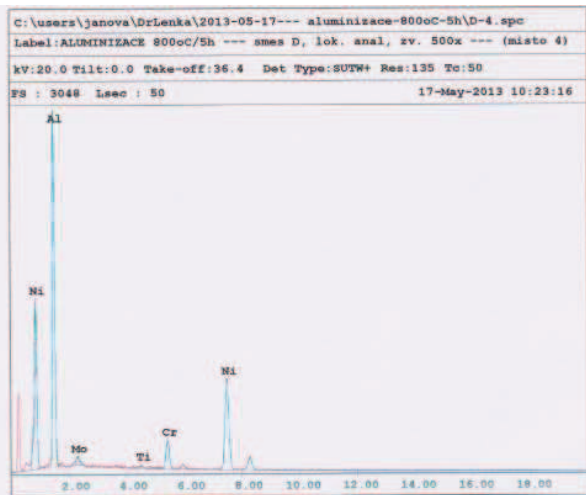
Obr. P.3.13 Výsledky lokální chemické mikroanalýzy EDS místa 1 a 2 na vzorku D.



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 44.47 | 63.55 | 0.1999 | 1.0367 | 0.4334 | 1.0004 |
| MoL | 2.81 | 1.13 | 0.0167 | 0.8548 | 0.6955 | 1.0007 |
| TiK | 0.50 | 0.40 | 0.0046 | 0.9519 | 0.9352 | 1.0369 |
| CrK | 7.41 | 3.49 | 0.0724 | 0.9498 | 0.9697 | 1.0609 |
| NiK | 44.82 | 29.43 | 0.4287 | 0.9664 | 0.9898 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

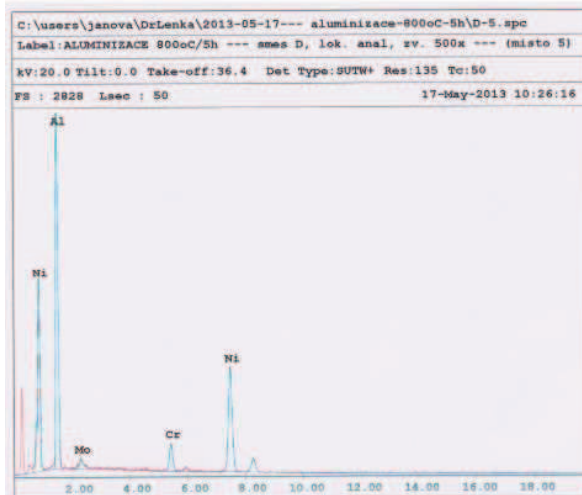
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 452.08 | 8.80 | 0.68 | 51.37 |
| MoL | 13.70 | 11.30 | 6.22 | 1.21 |
| TiK | 4.90 | 7.16 | 12.65 | 0.68 |
| CrK | 59.84 | 7.28 | 2.04 | 8.22 |
| NiK | 187.14 | 3.52 | 1.05 | 53.16 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 44.72 | 63.82 | 0.2006 | 1.0363 | 0.4327 | 1.0004 |
| MoL | 2.77 | 1.11 | 0.0164 | 0.8544 | 0.6941 | 1.0006 |
| TiK | 0.51 | 0.41 | 0.0047 | 0.9515 | 0.9350 | 1.0360 |
| CrK | 6.53 | 4.84 | 0.0635 | 0.9494 | 0.9655 | 1.0626 |
| NiK | 45.47 | 29.83 | 0.4352 | 0.9660 | 0.9906 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

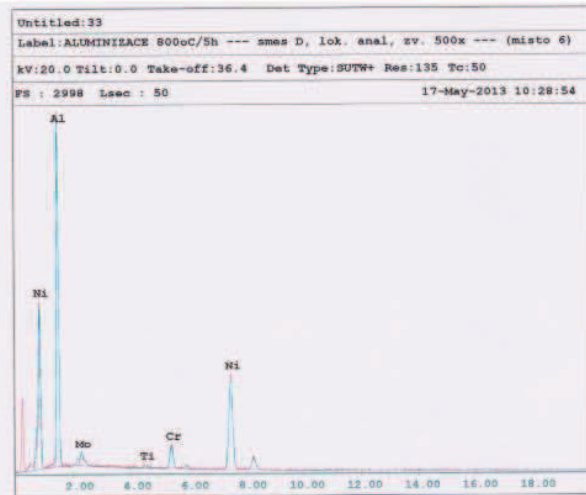
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 455.12 | 9.24 | 0.68 | 49.26 |
| MoL | 13.50 | 12.82 | 6.55 | 1.05 |
| TiK | 5.04 | 7.38 | 12.49 | 0.68 |
| CrK | 53.00 | 6.44 | 2.17 | 8.23 |
| NiK | 190.54 | 4.62 | 1.05 | 41.24 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 43.07 | 62.36 | 0.1889 | 1.0371 | 0.4214 | 1.0004 |
| MoL | 2.82 | 1.15 | 0.0168 | 0.8555 | 0.6936 | 1.0005 |
| CrK | 5.82 | 4.37 | 0.0573 | 0.9504 | 0.9704 | 1.0678 |
| NiK | 48.28 | 32.12 | 0.4631 | 0.9672 | 0.9917 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 423.62 | 9.82 | 0.70 | 43.14 |
| MoL | 13.66 | 10.46 | 6.09 | 1.31 |
| CrK | 47.12 | 6.80 | 2.32 | 7.36 |
| NiK | 201.06 | 5.44 | 1.02 | 36.96 |

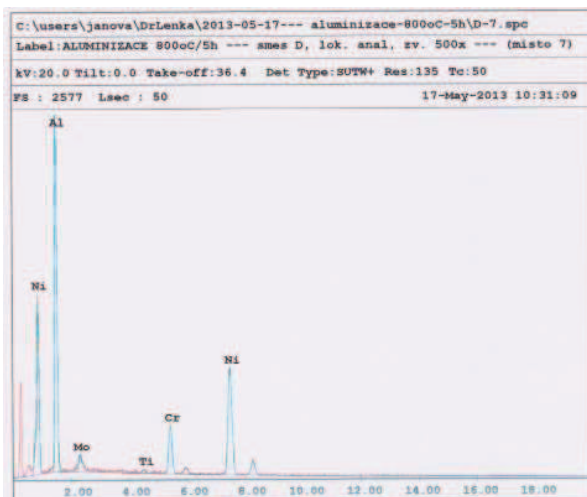


EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 43.65 | 63.10 | 0.1947 | 1.0379 | 0.4296 | 1.0005 |
| MoL | 4.19 | 1.70 | 0.0250 | 0.8562 | 0.6966 | 1.0005 |
| TiK | 0.52 | 0.42 | 0.0047 | 0.9532 | 0.9318 | 1.0341 |
| CrK | 5.28 | 3.96 | 0.0517 | 0.9512 | 0.9675 | 1.0635 |
| NiK | 46.37 | 30.81 | 0.4449 | 0.9680 | 0.9912 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 432.04 | 9.16 | 0.69 | 47.17 |
| MoL | 20.08 | 12.32 | 4.71 | 1.63 |
| TiK | 4.98 | 8.54 | 13.34 | 0.58 |
| CrK | 41.92 | 7.90 | 2.36 | 5.31 |
| NiK | 190.52 | 4.48 | 1.05 | 42.53 |

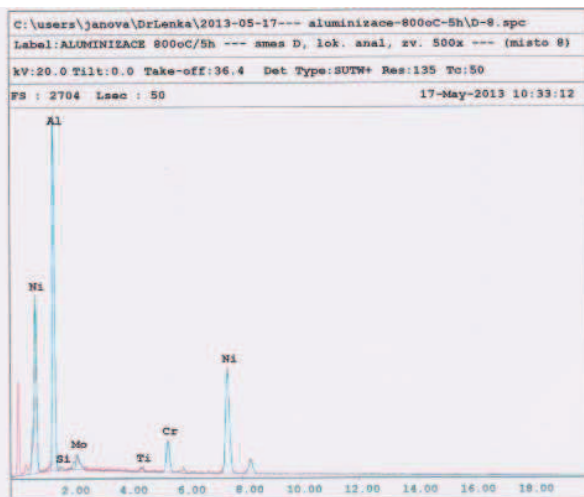
Obr. P.3.14 Výsledky lokální chemické mikroanalýzy EDS místa 3, 4, 5 a 6 na vzorku D.



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 39.67 | 59.02 | 0.1728 | 1.0418 | 0.4179 | 1.0006 |
| MoL | 4.40 | 1.84 | 0.0267 | 0.8339 | 0.7055 | 1.0008 |
| TiK | 0.56 | 0.47 | 0.0052 | 0.9570 | 0.9335 | 1.0393 |
| CrK | 9.20 | 7.10 | 0.0902 | 0.9550 | 0.9683 | 1.0600 |
| NiK | 46.17 | 31.56 | 0.4431 | 0.9721 | 0.9873 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 387.60 | 8.28 | 0.73 | 46.81 |
| MoL | 21.70 | 9.90 | 4.20 | 2.19 |
| TiK | 5.36 | 7.80 | 11.70 | 0.71 |
| CrK | 79.92 | 7.28 | 1.80 | 10.15 |
| NiK | 191.80 | 4.48 | 1.04 | 42.81 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

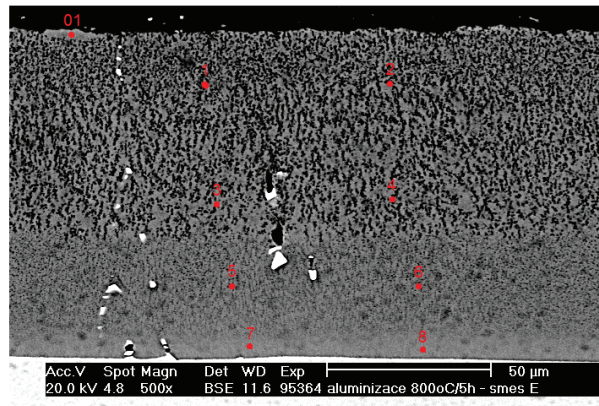
| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 41.22 | 60.40 | 0.1811 | 1.0392 | 0.4225 | 1.0006 |
| SiK | 0.31 | 0.32 | 0.0020 | 1.0691 | 0.3643 | 1.0008 |
| MoL | 4.02 | 1.66 | 0.0241 | 0.8575 | 0.6995 | 1.0006 |
| TiK | 0.81 | 0.67 | 0.0075 | 0.9546 | 0.9330 | 1.0361 |
| CrK | 6.35 | 4.98 | 0.0642 | 0.9525 | 0.9675 | 1.0629 |
| NiK | 46.88 | 31.57 | 0.4498 | 0.9695 | 0.9898 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 397.86 | 8.44 | 0.72 | 47.14 |
| SiK | 4.12 | 8.00 | 13.40 | 0.52 |
| MoL | 19.20 | 11.44 | 4.78 | 1.68 |
| TiK | 7.82 | 7.50 | 8.64 | 1.04 |
| CrK | 51.56 | 7.00 | 2.22 | 7.37 |
| NiK | 190.74 | 4.48 | 1.05 | 42.58 |

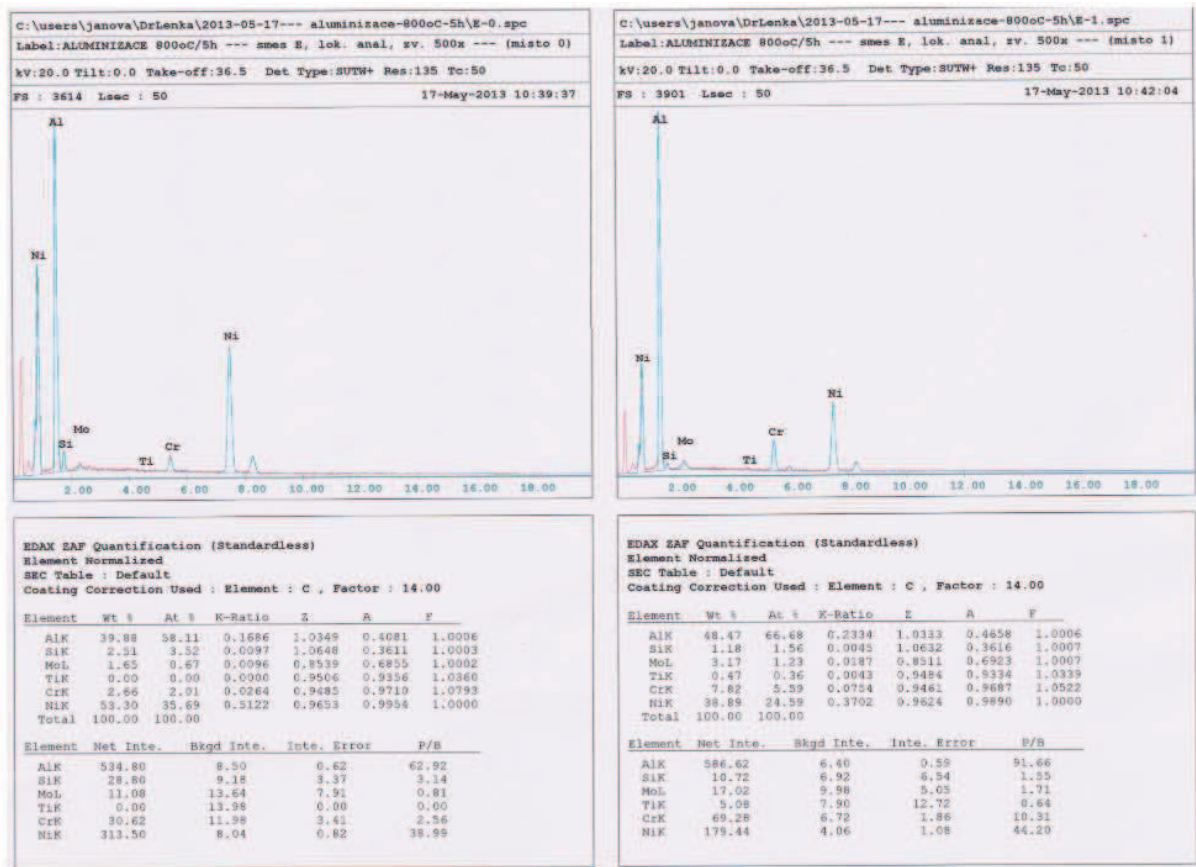
Obr. P.3.15 Výsledky lokální chemické mikroanalýzy EDS místa 7 a 8 na vzorku D.

E / 5h

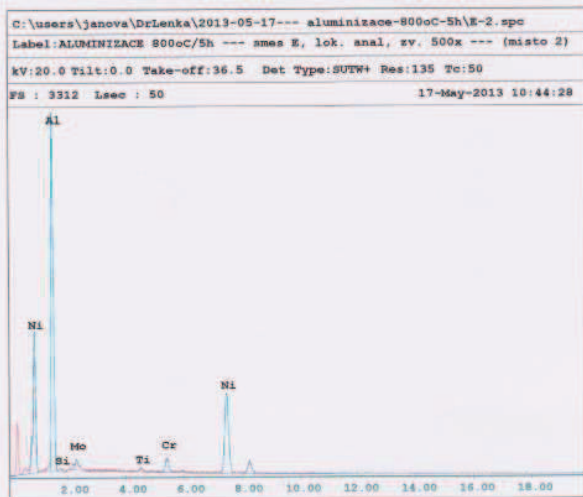
Směs E



Obr. P.3.16 Snímek difúzní vrstvy připravené ze směsi E s analyzovanými místy, REM.



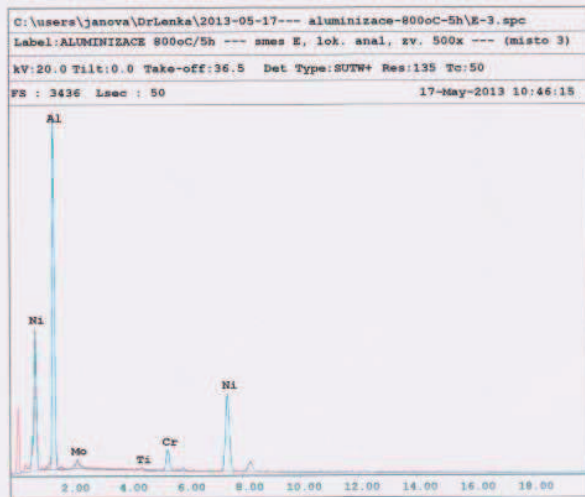
Obr. P.3.1 Výsledky lokální chemické mikroanalýzy EDS místa 0 a 1 na vzorku E.



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 47.41 | 66.29 | 0.2191 | 1.0338 | 0.4468 | 1.0005 |
| SiK | 0.51 | 0.69 | 0.0020 | 1.0636 | 0.3567 | 1.0006 |
| MoL | 3.35 | 1.32 | 0.0197 | 0.8520 | 0.6890 | 1.0004 |
| TiK | 0.73 | 0.57 | 0.0066 | 0.9491 | 0.9321 | 1.0308 |
| CrK | 3.35 | 2.43 | 0.0326 | 0.9469 | 0.9673 | 1.0633 |
| NiK | 44.66 | 28.70 | 0.4273 | 0.9634 | 0.9932 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

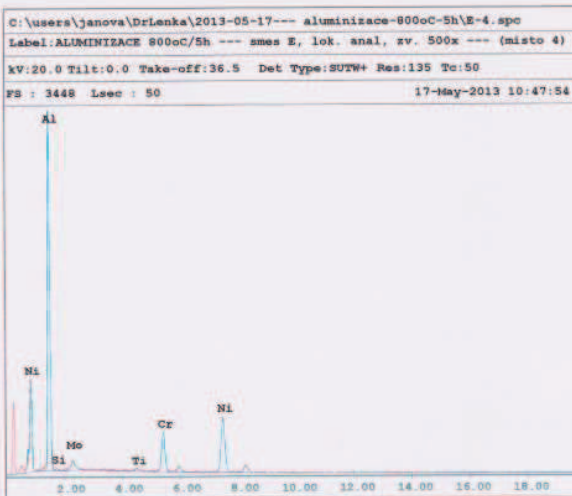
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 494.20 | 7.80 | 0.65 | 63.36 |
| SiK | 4.14 | 6.84 | 14.42 | 0.61 |
| MoL | 16.06 | 11.58 | 5.51 | 1.39 |
| TiK | 7.08 | 7.98 | 9.59 | 0.89 |
| CrK | 26.88 | 7.16 | 3.38 | 3.75 |
| NiK | 185.96 | 3.84 | 1.06 | 48.43 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 47.81 | 66.73 | 0.2218 | 1.0341 | 0.4484 | 1.0004 |
| SiK | 2.33 | 1.15 | 0.0172 | 0.8521 | 0.6908 | 1.0005 |
| MoL | 0.51 | 0.40 | 0.0066 | 0.9493 | 0.9333 | 1.0311 |
| TiK | 0.37 | 0.89 | 0.0523 | 0.9471 | 0.9688 | 1.0604 |
| CrK | 43.39 | 27.83 | 0.4145 | 0.9635 | 0.9916 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

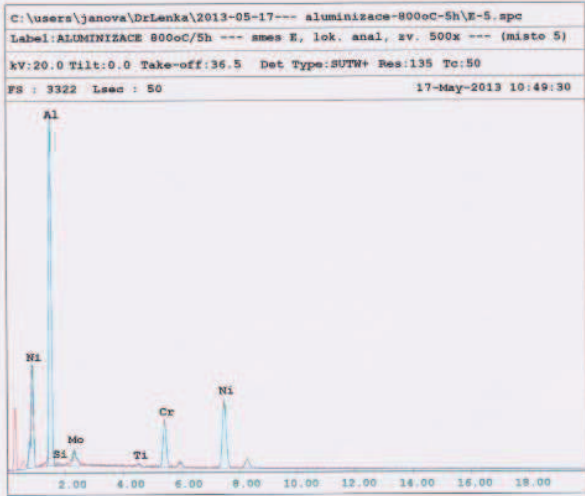
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 503.38 | 8.20 | 0.64 | 61.39 |
| SiK | 14.18 | 11.04 | 6.01 | 1.28 |
| TiK | 4.99 | 7.38 | 12.62 | 0.67 |
| CrK | 43.36 | 7.28 | 2.48 | 5.96 |
| NiK | 181.52 | 4.42 | 1.07 | 41.07 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 50.27 | 68.41 | 0.2531 | 1.0342 | 0.4465 | 1.0007 |
| SiK | 0.60 | 0.79 | 0.0023 | 1.0641 | 0.3644 | 1.0009 |
| MoL | 3.87 | 1.48 | 0.0210 | 0.8515 | 0.6987 | 1.0010 |
| TiK | 0.64 | 0.49 | 0.0059 | 0.9491 | 0.9333 | 1.0358 |
| CrK | 11.43 | 8.07 | 0.1092 | 0.9468 | 0.9682 | 1.0421 |
| NiK | 33.18 | 20.75 | 0.3146 | 0.9629 | 0.9849 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 523.94 | 7.40 | 0.63 | 70.80 |
| SiK | 4.56 | 6.96 | 13.04 | 0.70 |
| MoL | 17.28 | 9.92 | 4.85 | 1.94 |
| TiK | 5.80 | 7.40 | 11.07 | 0.78 |
| CrK | 82.60 | 6.18 | 1.67 | 13.37 |
| NiK | 125.66 | 4.48 | 1.31 | 28.05 |

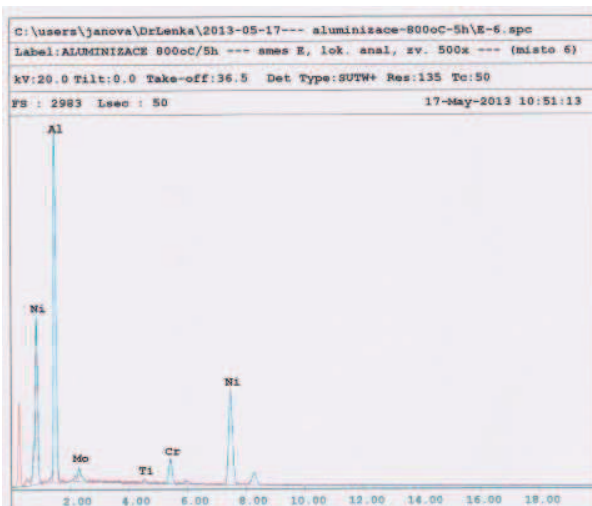


EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 45.47 | 64.38 | 0.2175 | 1.0384 | 0.4603 | 1.0008 |
| SiK | 0.48 | 0.63 | 0.0019 | 1.0684 | 0.3690 | 1.0011 |
| MoL | 5.01 | 1.99 | 0.0303 | 0.8560 | 0.7054 | 1.0010 |
| TiK | 0.66 | 0.53 | 0.0061 | 0.9536 | 0.9319 | 1.0373 |
| CrK | 11.47 | 8.43 | 0.1104 | 0.9513 | 0.9672 | 1.0462 |
| NiK | 36.91 | 24.02 | 0.3517 | 0.9679 | 0.9844 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 483.30 | 8.62 | 0.65 | 57.40 |
| SiK | 3.96 | 7.92 | 15.89 | 0.50 |
| MoL | 24.36 | 10.12 | 3.88 | 2.41 |
| TiK | 6.40 | 7.96 | 10.44 | 0.80 |
| CrK | 89.66 | 6.42 | 1.60 | 13.97 |
| NiK | 150.76 | 4.22 | 1.18 | 35.73 |

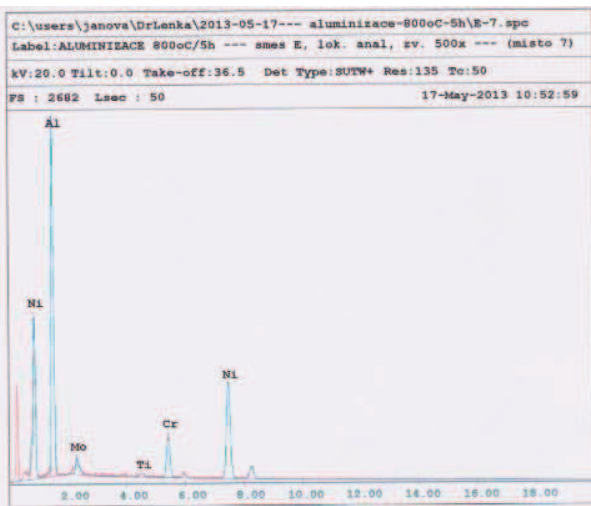
Obr. P.3.18 Výsledky lokální chemické mikroanalýzy EDS místa 2, 3, 4 a 5 na vzorku E.



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 44.42 | 63.75 | 0.1998 | 1.0371 | 0.4334 | 1.0000 |
| MoL | 3.77 | 1.52 | 0.0224 | 0.8553 | 0.0956 | 1.0005 |
| TiK | 0.61 | 0.50 | 0.0056 | 0.2524 | 0.9327 | 1.0342 |
| CrK | 5.52 | 4.11 | 0.0539 | 0.9503 | 0.9679 | 1.0626 |
| NiK | 45.68 | 30.13 | 0.4378 | 0.9671 | 0.9911 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

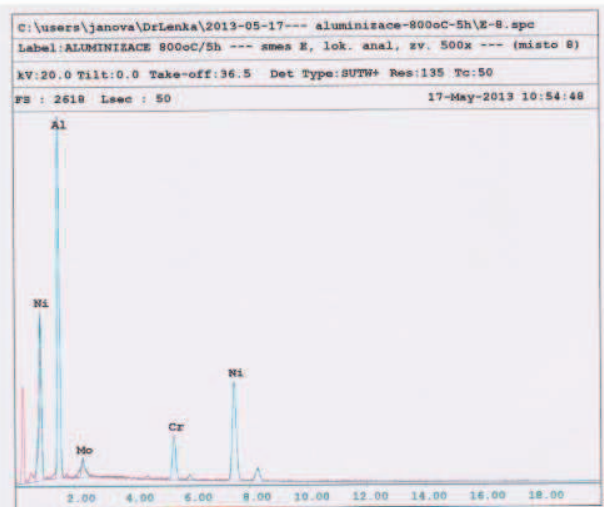
| Element | Net Inte. | Bkqd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 440.30 | 7.50 | 0.69 | 58.71 |
| MoL | 17.92 | 10.58 | 4.93 | 1.69 |
| TiK | 5.88 | 7.28 | 10.87 | 0.81 |
| CrK | 43.42 | 6.80 | 2.46 | 6.39 |
| NiK | 186.14 | 4.80 | 1.08 | 38.78 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 41.61 | 60.98 | 0.1852 | 1.0403 | 0.4276 | 1.0006 |
| MoL | 4.45 | 1.83 | 0.0269 | 0.8584 | 0.7039 | 1.0008 |
| TiK | 0.70 | 0.58 | 0.0065 | 0.9556 | 0.9330 | 1.0376 |
| CrK | 8.61 | 6.55 | 0.0861 | 0.9535 | 0.9677 | 1.0582 |
| NiK | 44.63 | 30.06 | 0.4278 | 0.9705 | 0.9877 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkqd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 403.26 | 8.00 | 0.72 | 50.41 |
| MoL | 21.22 | 12.04 | 4.49 | 1.76 |
| TiK | 6.70 | 7.90 | 10.01 | 0.83 |
| CrK | 66.90 | 7.28 | 1.91 | 9.19 |
| NiK | 179.68 | 4.22 | 1.08 | 42.58 |



EDAX ZAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

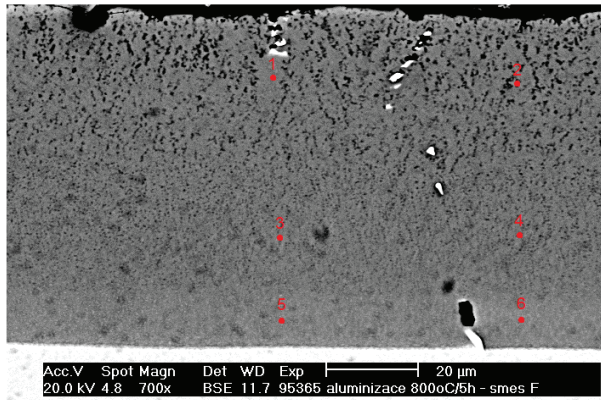
| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 41.44 | 60.92 | 0.1841 | 1.0406 | 0.4266 | 1.0008 |
| MoL | 4.62 | 1.98 | 0.0291 | 0.8388 | 0.7040 | 1.0007 |
| CrK | 8.67 | 6.77 | 0.0868 | 0.9539 | 0.9686 | 1.0589 |
| NiK | 44.87 | 30.32 | 0.4304 | 0.9710 | 0.9878 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkqd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 392.96 | 8.38 | 0.73 | 46.89 |
| MoL | 22.94 | 10.58 | 4.15 | 2.13 |
| CrK | 67.70 | 6.80 | 1.88 | 9.90 |
| NiK | 177.26 | 4.28 | 1.09 | 41.42 |

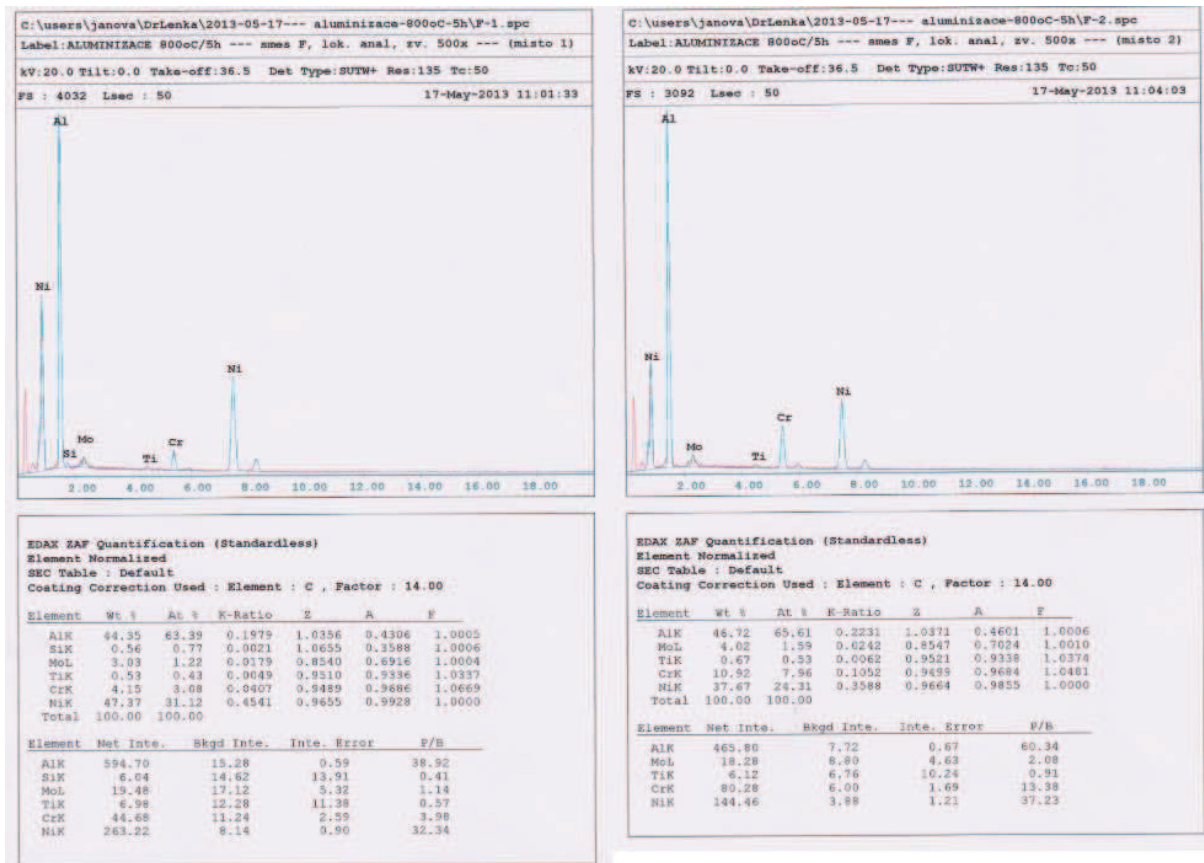
Obr. P.3.17 Výsledky lokální chemické mikroanalýzy EDS místa 6, 7 a 8 na vzorku E.

F / 5h

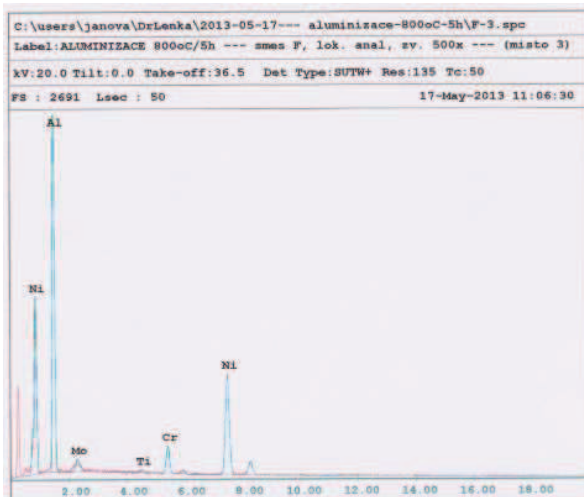
Směs F



Obr. P.3.18 Snímek difuzní vrstvy připravené ze směsi F s analyzovanými místy, REM.



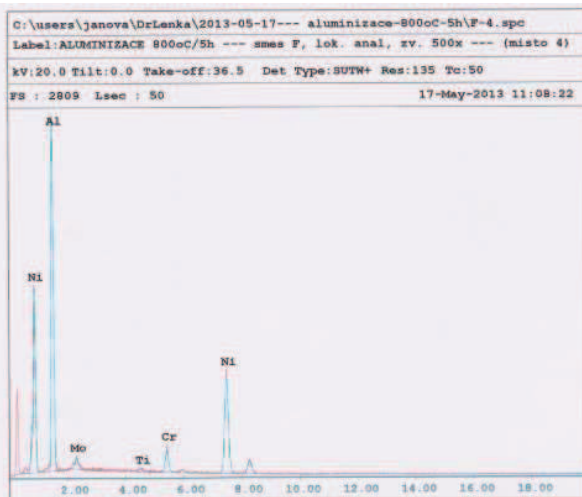
Obr. P.3.19 Výsledky lokální chemické mikroanalýzy EDS místa 1 a 2 na vzorku F.



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 43.78 | 63.13 | 0.1949 | 1.0373 | 0.4290 | 1.0004 |
| MoL | 3.56 | 1.45 | 0.0212 | 0.8556 | 0.6957 | 1.0005 |
| TiK | 0.41 | 0.34 | 0.0038 | 0.9526 | 0.9333 | 1.0330 |
| CrK | 5.47 | 4.09 | 0.0536 | 0.9505 | 0.9886 | 1.0647 |
| NiK | 46.77 | 30.98 | 0.4485 | 0.9673 | 0.9914 | 1.0060 |
| Total | 100.00 | 100.00 | | | | |

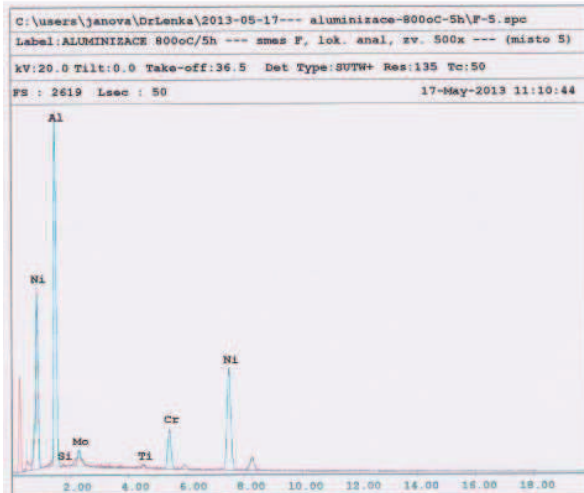
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 416.28 | 7.80 | 0.71 | 53.37 |
| MoL | 16.42 | 9.62 | 3.14 | 1.71 |
| TiK | 3.84 | 9.26 | 17.41 | 0.41 |
| CrK | 41.84 | 8.68 | 2.60 | 4.92 |
| NiK | 184.74 | 4.90 | 1.06 | 46.19 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 42.73 | 63.06 | 0.1941 | 1.0371 | 0.4278 | 1.0004 |
| MoL | 3.41 | 1.39 | 0.0203 | 0.8554 | 0.6951 | 1.0005 |
| TiK | 0.63 | 0.51 | 0.0058 | 0.9525 | 0.9335 | 1.0346 |
| CrK | 4.99 | 3.73 | 0.0489 | 0.9504 | 0.9683 | 1.0656 |
| NiK | 47.23 | 31.30 | 0.4531 | 0.9672 | 0.9918 | 1.0060 |
| Total | 100.00 | 100.00 | | | | |

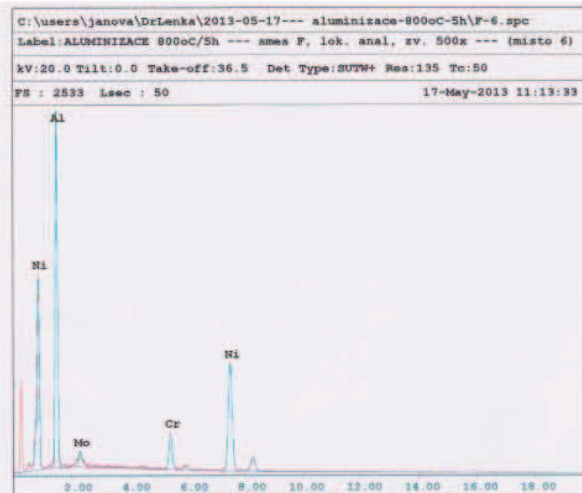
| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 413.62 | 7.52 | 0.71 | 55.00 |
| MoL | 15.68 | 11.52 | 5.61 | 1.36 |
| TiK | 5.88 | 7.76 | 11.13 | 0.76 |
| CrK | 38.08 | 6.64 | 2.66 | 5.73 |
| NiK | 186.20 | 4.20 | 1.06 | 44.33 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 40.63 | 60.02 | 0.1784 | 1.0407 | 0.4217 | 1.0006 |
| SiK | 0.00 | 0.00 | 0.0000 | 1.0797 | 0.3661 | 1.0009 |
| MoL | 4.36 | 1.81 | 0.0264 | 0.8590 | 0.7042 | 1.0007 |
| TiK | 0.68 | 0.57 | 0.0063 | 0.9561 | 0.9333 | 1.0379 |
| CrK | 8.19 | 6.28 | 0.0802 | 0.9541 | 0.9680 | 1.0607 |
| NiK | 46.15 | 31.33 | 0.4429 | 0.9712 | 0.9882 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 377.48 | 10.30 | 0.75 | 36.65 |
| SiK | 0.00 | 9.36 | 0.00 | 0.00 |
| MoL | 20.22 | 11.14 | 4.36 | 1.92 |
| TiK | 6.30 | 7.92 | 19.56 | 0.80 |
| CrK | 62.02 | 7.28 | 2.60 | 8.52 |
| NiK | 180.72 | 4.80 | 1.08 | 37.65 |



EDAX EAF Quantification (Standardless)
 Element Normalized
 SEC Table : Default
 Coating Correction Used : Element : C , Factor : 14.00

| Element | Wt % | At % | K-Ratio | Z | A | F |
|---------|--------|--------|---------|--------|--------|--------|
| AlK | 41.03 | 60.49 | 0.1785 | 1.0397 | 0.4182 | 1.0005 |
| MoL | 4.00 | 1.66 | 0.0241 | 0.8581 | 0.7000 | 1.0006 |
| CrK | 6.94 | 5.31 | 0.0683 | 0.9531 | 0.9694 | 1.0653 |
| NiK | 48.02 | 32.54 | 0.4613 | 0.9762 | 0.9901 | 1.0000 |
| Total | 100.00 | 100.00 | | | | |

| Element | Net Inte. | Bkgd Inte. | Inte. Error | P/B |
|---------|-----------|------------|-------------|-------|
| AlK | 376.70 | 7.60 | 0.74 | 49.57 |
| MoL | 18.40 | 10.56 | 4.83 | 1.74 |
| CrK | 52.68 | 7.28 | 2.20 | 7.24 |
| NiK | 187.78 | 3.58 | 1.05 | 52.45 |

Obr. P.3.20 Výsledky lokální chemické mikroanalýzy EDS místa 3, 4, 5 a 6 na vzorku F.