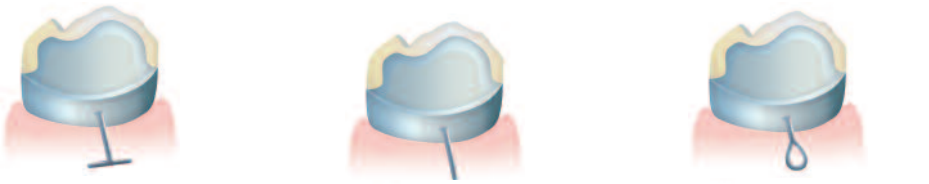
IPS InLine® PoM – PROCESSING

Press-on-Metal Ceramic

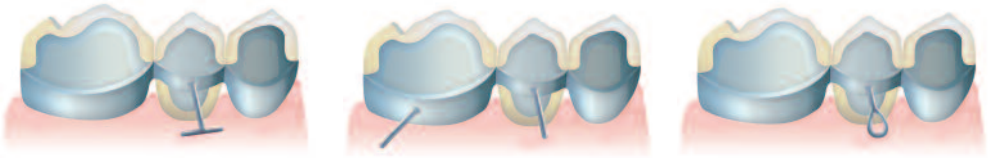
The IPS InLine PoM (Press-on-Metal) ingots are ideally coordinated with a wide selection of Ivoclar Vivadent alloys in the CTE range between 13.8 and 14.5 x $10^{-6}K^{-1}$ 25-500°C, < 10% silver.

1 Framework design

Crown frameworks

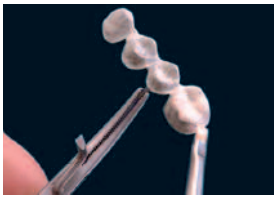


Bridge frameworks



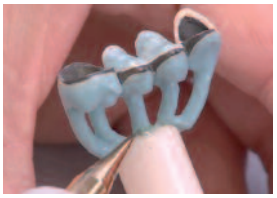
Attach retentions in the area of the pontic. The retention should be carefully removed without overheating not earlier than after glaze firing.
Tip: Use e.g. a wax wire with a diameter of 1.0–1.5 mm, to shape retentions.

2 1st and 2nd Opaquer firing



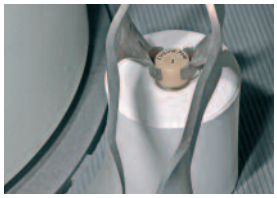
If the wash opaquer layer is only thinly applied, the alloy has another chance to degas during firing. The second opaquer layer is then applied in such a way that it covers the entire framework. Its shade can be individualized using the Intensive Opaquers.

3 Exact planning per wax-up



Fabricate a wax-up of the opaquerized metal framework in the desired shape and function. Sprueing is carried out on the IPS e.max investment base in the direction of flow and always in the thickest area.

4 Investing / Pressing / Divesting



Invest with IPS PressVEST (e.g. over night) or IPS PressVEST Speed. Place the **cool** IPS InLine PoM ingot in the **hot** investment ring with the ingot shade facing upwards. Subsequently, place the powder-coated (with IPS e.max Alox Plunger Separator) **cold** IPS e.max Alox plunger into the **hot** investment ring and press. Rough divesting is carried out with the jet medium at 4 bar pressure. Reduce the pressure to approximately 1–1.5 bar for fine divestment.

5 Finishing

Now, the restoration is fitted on the master model for the first time and the proximal contact surfaces are adjusted by grinding. Carefully separate the sprues above the contact area using a diamond disk. Then, finish the anatomic shape and the surface structure using the recommended grinding instruments. Subsequently, the new stains are used to apply characterizations and/or the shade is intensified using the corresponding dentin shades. The **accurately fitting** IPS InLine PoM bridge is now completed.

IPS InLine® PoM
Press-on-Metal Ceramic

ivoclar vivadent®

Firing parameters

IPS InLine PoM *Press-on-Metal Ceramic*	T	B	S	t↗	H	V1	V2
1st + 2nd Opaquer firing	930°C 1706°F	403°C 757°F	6' 6'	100°C 180°F	2' 2'	450°C 842°F	929°C 1704°F
Touch-Up firing	840°C 1544°F	403°C 757°F	4' 4'	60°C 108°F	1' 1'	450°C 842°F	839°C 1542°F
NEW Shade / Stains firing	800°C 1472°F	403°C 757°F	6' 6'	60°C 108°F	1' 1'	450°C 842°F	799°C 1470°F
NEW Glaze firing	800°C 1472°F	403°C 757°F	6' 6'	60°C 108°F	2' 2'	450°C 842°F	799°C 1470°F
NEW Add-on firing Add-On 690°C/1274°F	690°C 1274°F	403°C 757°F	4' 4'	60°C 108°F	1' 1'	450°C 842°F	689°C 1272°F

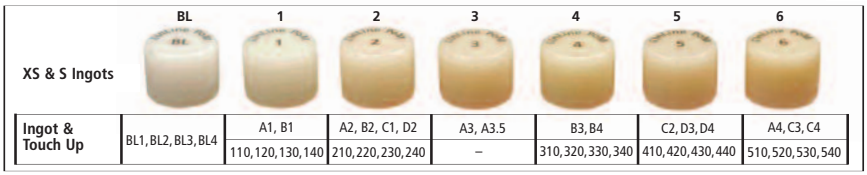
Sprueing

	SIngle tooth crowns, bridges
Investment base	100 g and 200 g
Wax sprue ø	3 mm
Length of wax sprue	min. 3 mm, max. 10 mm
Length of wax object including sprue	max. 15–16 mm
Attachment point at the wax object	thickest part of the wax-up; every bridge unit
Sprueing angle to the wax object	in the direction of flow of the ceramic; observe the cusp angles
Sprueing angle to the investment ring base	45–60°
Design of the attachment points	rounded, no angels or edges
Distance between objects	min. 3 mm
Distance to the silicone ring	Crowns: min. 10 mm; Bridges: 5–8 mm
Important	Larger bridges can also be placed rather in the center of the investment ring

Mixing ratio of the investment material

Investment material	100-g investment ring	200-g investment ring
IPS PressVEST	13 ml liquid 9 ml dist. water	26 ml liquid 18 ml dist. water
IPS PressVEST Speed	16 ml liquid 11 ml dist. water	32 ml liquid 22 ml dist. water

Selection of the ingots



Ingot & Touch Up	BL1, BL2, BL3, BL4	A1, B1	A2, B2, C1, D2	A3, A3.5	B3, B4	C2, D3, D4	A4, C3, C4
		110, 120, 130, 140	210, 220, 230, 240	–	310, 320, 330, 340	410, 420, 430, 440	510, 520, 530, 540

With only seven shades, all Chromascop, A–D and the new Bleach BL shades can be easily reproduced. The final tooth shade is achieved by individaul characterization with the new Shade/Stains and Glaze materials.

2 ingot sizes

XS S

Press parameters

	B	T	H 100-g	H 200-g	t↗	V1	V2	N / E
EP 500 / V2.9	700°C 1292°F	950°C 1742°F	10' 10'	20' 20'	60°C 108°F	500°C 932°F	950°C 1742°F	0 Progr. 11-20
EP 600 / EP 600 Combi	700°C 1292°F	940°C 1724°F	10' 10'	20' 20'	60°C 108°F	500°C 932°F	940°C 1724°F	**250 µm/min.***
Programat EP 5000	700°C 1292°F	940°C 1724°F	10' 10'	20' 20'	60°C 108°F	500°C 932°F	940°C 1724°F	**250 µm/min.***

***Important**: If you enter the program manually, observe the abort criterion (stop speed).

609658/0907/e/BVD