



Hermes

"YR" stitch-bonded abrasive belts with inserted tape joint

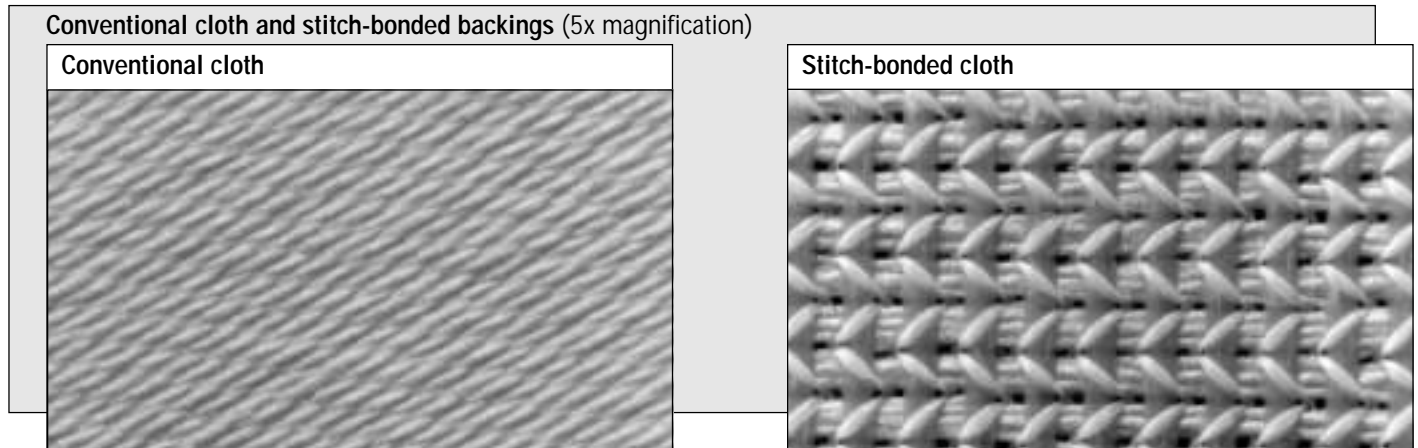
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Backing

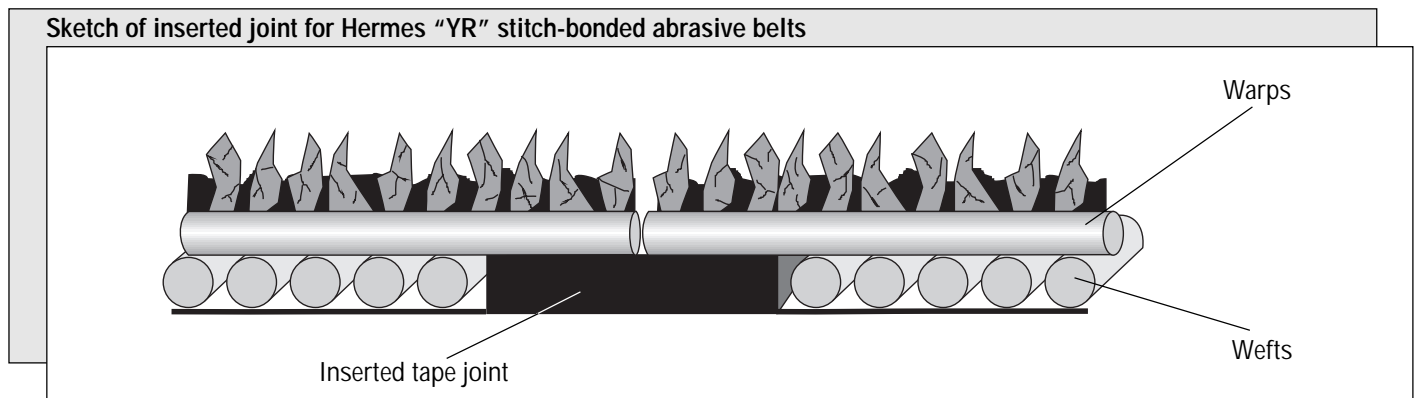
Hermes "YR" stitch-bonded abrasive belts give considerable benefits in terms of service life, power transfer capability and surface quality.

The difference between stitch-bonded backing cloth and conventional cloth is the relative position of warps and wefts.

In conventional cloth the wefts run alternately above and below the warps, whereas in stitch-bonded cloth the wefts lie on the warps. Cohesion is achieved by sewing the warps and wefts together at the intersection points. This means that stitch-bonded cloths feature very low stretch even when subject to high tensile forces, due to the straightness of the warps.



Joint



Abrasive belts with backings made of "YR" stitch-bonded fabrics have an inserted joint.

The wefts on the reverse side that run transverse to the running direction of the abrasive belt and are not subject to tensile strain are removed in the region of the joint. This means that the tape can be inserted into the backing in such a way that the thickness of the abrasive belt remains unchanged in the region of the joint.

This is different from abrasive belts with conventional backing, where the tape joint is normally glued to the reverse side. This means that the abrasive belt is thicker over the joint area. This may cause impact marks on the workpiece surface from abrasive machining.

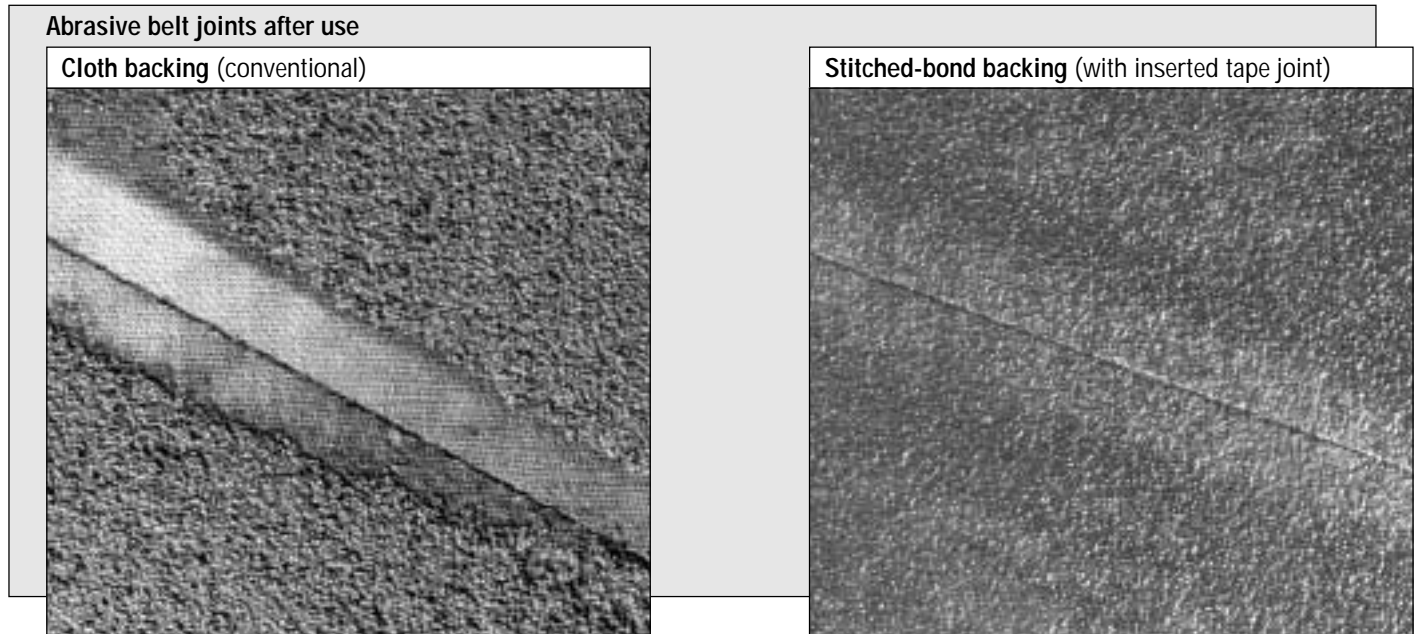
Benefits

The left-hand photo shows what happens with a conventional cloth backing, due to increased pressure over the joint area, resulting in excessive grain and bond wear. The state shown here means the end of abrasive belt life, or if it is used further, the result will be failure at the joint.

The right-hand photo shows the joint of a Hermes "YR" stitched-bond abrasive belt after a comparable amount of service. The joint does not show higher wear.

YR abrasive belts also have considerably lower stretch and particularly high form stability compared with conventional cloth backings. Experience also shows that abrasive belts with stitched-bond backing generally permit a higher material removal rate.

Thus YR stitched-bond abrasive belts with inserted joints make it possible to achieve a considerable improvement in belt abrasive performance with respect to surface quality and material removal rate.



Patents have been issued / applied for, both for the design of the joint with the inserted tape and for the specially designed stitch-bonded cloths as backing.

Hermes "YR" stitch-bonded abrasive belts				
Type	SB 378 YR	SB 378 43 YR	SB 379 YR	SB 488 YR
Code	37840	37843	37930	48840
Grain	A/O	A/O + Sapphire Blue	S/C	Z/A
Grit range	P 24, P 36 - P 80 P 120	P 40, P 60 - P 120	P 36 - P 150	# 24, # 36 - # 80
Bonding	Resin	Resin	Resin, antistatic	Resin
Backing	YR stitch-bond	YR stitch-bond	YR stitch-bond	YR stitch-bond
Max. production width	1640 mm	1640 mm	1640 mm	1640 mm
Joint		EB 036 (SG 36) inserted tape joint		
Form of delivery		FE 040 belts (width up to 310 mm) FE 041 wide belts (width 311 to 1630 mm)		

