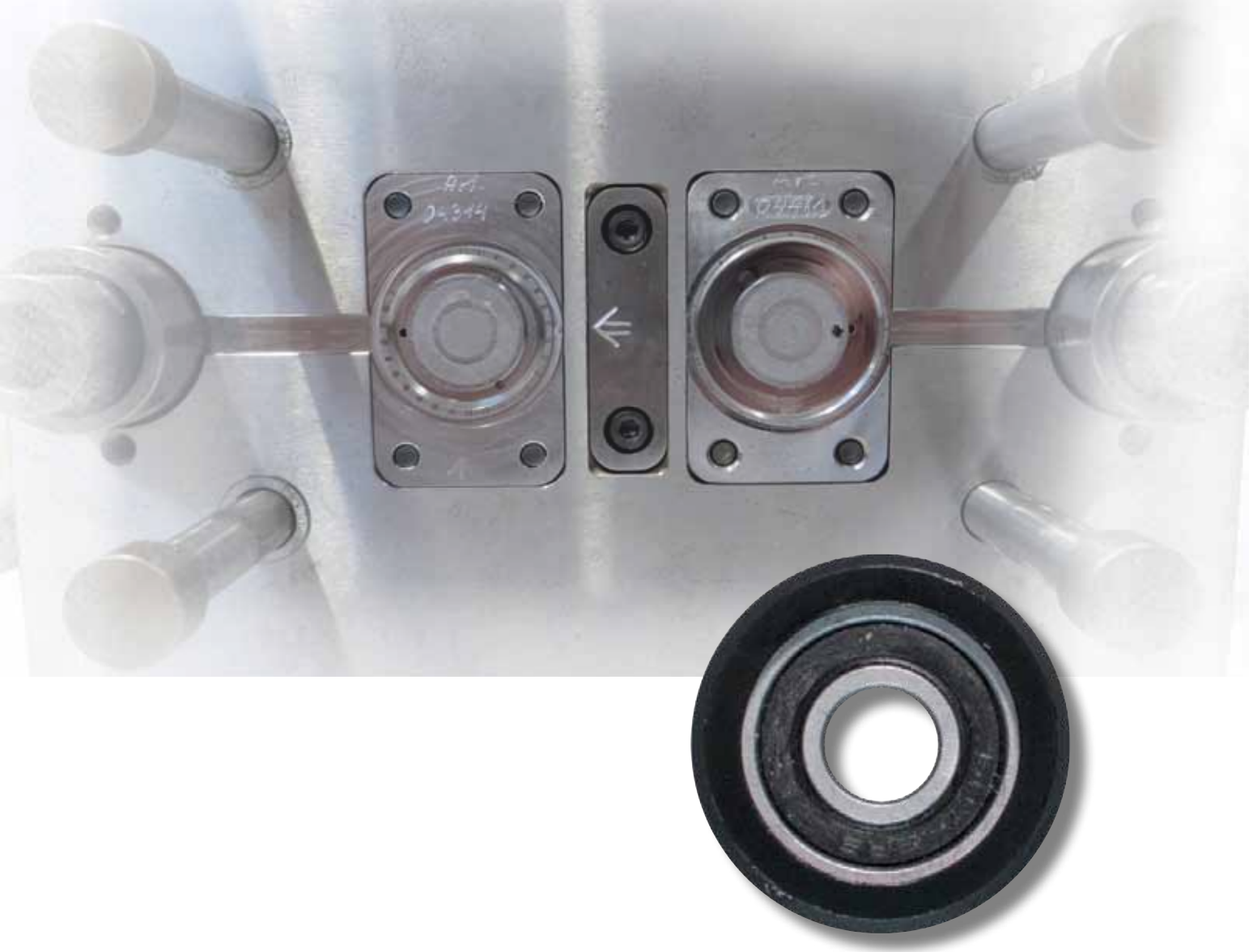


LAURAMID INJECT® 970

The newly developed injection moulding polyamide



NEW LOWEST WATER ABSORPTION
OF ALL INJECTION MOULDED
POLYAMIDES!

LAURAMID INJECT® 970

Greater performance for injection moulded rollers



← Rollers made of Lauramid Inject® 970 are produced on state-of-the-art injection moulding machines

The logical alternative for functional injection moulded parts:
The new Lauramid Inject® 970 developed by the plastics expert Handtmann Elteka.

Rollers made of Lauramid Inject® 970. Higher performance than PA 6.

Lauramid Inject® 970 is an injection mouldable, black-dyed granulate whose formula has been developed with the know-how of the plastics engineers of Handtmann Elteka during the course of intensive research and test series. A re-granulate is produced from the cast PA 12C Lauramid®. The result:

A material which, due to the low water absorption, has moderate swelling properties and achieves up to 80 % of the excellent mechanical properties of the cast Lauramid®. Castors, idlers or guide rollers made of Lauramid Inject® 970 therefore remain dimensionally stable even in humid conditions or in applications exposed to the weather. Car manufacturers already value this and use Lauramid Inject® 970 rollers in lightweight sliding doors.

Convincing properties of Lauramid Inject® 970.

- significantly lower water absorption than all other injectable polyamides
- good dimensional stability and wear resistance
- high chemical resistance
- wide temperature range from -40 °C to +120 °C
- good shock absorption
- good resilience (memory effect)
- high creep resistance



↑ Example: Roller with directly insert-moulded standard ball bearings:
Left:
Outside diameter 29 mm
Binding thickness 5 mm



Right:
Outside diameter 24 mm
Binding thickness 2 mm



↑ Example: Guide roller
Outside diameter 21 mm
Length 21 mm
Hole 10 mm

Lauramid Inject® 970

- ideal for small-size components (e.g. rollers) in large batches
- component sizes:
outside diameter up to 30 mm, width/length: 10 - 16 mm
- insert moulding
thickness up to 5 mm
- no special ball bearings necessary

LAURAMID INJECT® 970

Greater performance for injection moulded rollers

	Test regulations	Unit	Lauramid Inject® 970	PA 12	PA 6	PA 6 30GF	PA 6.6	PA 4.6
Yield stress	ISO 527	Mpa	38 - 44	45	80/45	175/110	85/50	100/50
Elongation at break	ISO 527	%	>200	>50	>50/-	3.5/5.5	40/150	25/>100
Tensile modulus of elasticity	ISO 527	Mpa	1250 - 1650	1350	3000/1000	9000/6000	3100/1100	3300/1300
Vicat B50	ISO 306	°C	143 - 151	140	196	215	238	238
Shore D hardness	ISO 868		67 - 72	73	82	86	84	90
Density	ISO 1183	kg/dm ³	1.02	1.01	1.13	1.36	1.14	1.18
Notched impact strength at 23 °C	ISO 179	kJ/m ²	6 - 12	6	14/60	15/30	5/20	13/17
Water absorption in normal climate	ISO 62	%	0.9	0.9	2.6	2.1	2.8	2.8
Water absorption in water storage	ISO 62	%	1.5	1.5	9.5	6.6	8.5	9.5
Where two values are given: 1 st value = dry 2 nd value = moist (50%)								

Application fields.

Automotive: Rollers for light-weight sliding doors in small cars or electric cars, rollers for seat adjustments in motor vehicles or buses

Work machines: Rollers for seat adjustments in fork-lift trucks

Logistics: Rollers for handling systems, linear handling equipment

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The primary colour of Lauramid Inject® 970 is black. Handtmann Elteka offers colour master batches on request for other colour components



HIGH-TECH PLASTICS

by Handtmann Elteka

Albert Handtmann Elteka GmbH & Co. KG

is a subsidiary of German Handtmann Holding. The traditional company was founded more than 135 years ago and is internationally active in engineering and construction.

Handtmann Elteka develops technical plastics. The materials Lauramid®, Lauramid Hybrid® and Lauramid Inject® 970 are employed in engineering as parts or complete systems in a large number of different fields.

Lauramid®:

Wear-resistant, temperature-resistant and light construction polyamide (PA 12C). In-gate steel hubs possible, food safe modifications available.

Lauramid Hybrid®:

With Lauramid® cast-in metal foam which enables very firm, yet extremely light components.

Lauramid Inject® 970:

Lauramid® chips re-granulated in a special process, suitable for producing injection-moulded components. Different material properties are almost equivalent to Lauramid®.

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