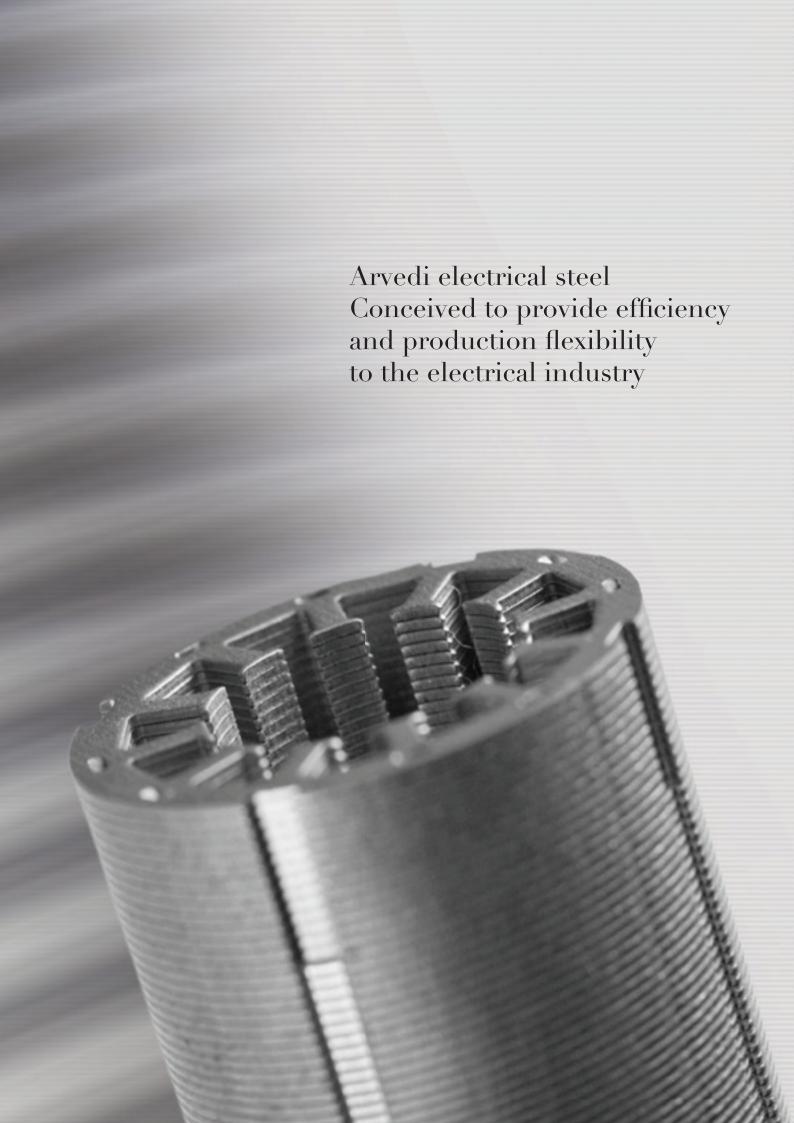
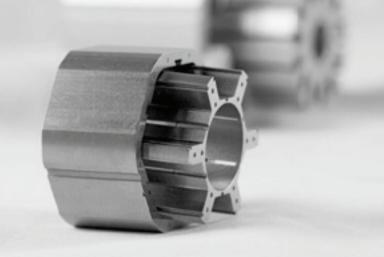
# **AcciaieriaArvedi**

# **Electrical industry**







# **Arvedi electrical steels**

The semi-processed grades are Non Grain-Oriented electrical steel which develop their required magnetic properties during a particular annealing of laminations or cores at the manufacturer's production site.

These grades are recrystallized after cold-rolling and annealing (bell-type furnaces) and subsequently subjected to skin-pass rolling with a defined degree of (critical) deformation to promote grain growth which results in further reduction of losses and increased permeability.

The skin-pass rolling produces a controlled surface roughness and ensures good material behaviour during punching operations. The magnetic properties are in accordance with EN 10341:2006. Arvedi semi-processed electrical steels are suitable for small industrial motors, fans and domestic appliances.







# **AMSI**<sup>M</sup>

# Cold Rolled NGO Eletrical Steel Strip and Sheet Delivered in the Semi-Processed State – EN 10341 and IEC 60404

Thickness range: 0.5 and 0.65 mm Width range: up to 1250 mm.

STEEL GRADE		Thickness	Max specific Total losses	Min magnetic Polarization	Conventional Density	REMARKS	
Steel name	Steel number	mm	W/kg @ 1.5T, 50Hz	T @ 2500 A/m, 50Hz	Kg / dm3		
M450-50K	1.0843	0.50	4.50	1.57	7.75		
M560-50K	1.0844	0.50	5.60	1.58	7.80		
M660-50K	1.0361	0.50	6.60	1.62	7.85		
M890-50K	1.0362	0.50	8.90	1.60	7.85		
M1050-50K	1.0363	0.50	10.50	1.57	7.85	Magnetic properties after testing at the	
M450-65K	1.0847	0.65	4.50	1.54	7.65	Spstein frame (IEC 60404) with samples in the reference condition	
M520-65K	1.0848	0.65	5.20	1.57	7.75	Anisotropy of losses and polarization <5%	
M630-65K	1.0849	0.65	6.30	1.58	7.80		
M800-65K	1.0364	0.65	8.00	1.62	7.85		
M1000-65K	1.0365	0.65	10.00	1.60	7.85		
M1200-65K	1.0366	0.65	12.00	1.57	7.85		

• Supplied with trimmed or as-rolled edges

- Surface condition as per indications of European Standard EN10341 (smooth and clean, free from grease and rust, etc.)
- Geometrical tolerances: thickness, width, length, residual curvature, edge camber and flatness (stacking factor) as per European Standard EN 10341
- Suitability for cutting / punching / welding: yes, it must be specified at the time of enquiry / order
- Marking, Packing: as per agreements with Customer

### NOTE:

other figures / performances not specified here are according to European Standard EN 10341





For a more complete customer service and in order to offer a customized product format, pre-processing operations are carried out on a number of slitting lines.

## **ARTME**<sup>IM</sup>

# Cold Rolled Steels for Electrical Applications with High Performance Punching Aptitude

**ARTME™** low carbon non-alloyed steel grade is the cold rolled product (coil or strips) specifically designed to meet User requirements for the manufacture of motor laminations, processing through punching / shearing of the strips.

### **MANUFACTURING STANDARDS**

Arvedi Standard

### **CHEMICAL COMPOSITION**

	С		P	S	
Min	-	-	-	-	
Max	0.060	0.500	0.010	0.010	

Reference values, in % weight

### **MECHANICAL PROPERTIES**

TENSILE STRENGTH (Avg, MPa)	YIELD to TENSILE STRENGTH RATIO	A80 (Avg, %)	Hardness HRB	MAX SPEC. TOTAL LESSES @ 1.51, 50 Hz
360 - 410	≥ 0.65	30 - 35	50 - 68	> 16 W/kg

Tensile properties measured transversal to rolling direction.

### **SUPPLY CONDITIONS**

**ARTME™** is supplied according to specifications defined in European Standard EN10131

### **FEASIBILITY**

Thickness: 0.3 – 1.5 mm Width: up to 1500 mm

Surface roughness: according to the definitions of European Standard EN10130 (Ra from 0.4

to 2.5 µm)











### **ISO 14001**

Istituto Italiano di Garanzia della Qualità and the company Det Norske Veritas Italy have certified the environmental management systems of Acciaieria Arvedi, Arvedi Tubi Acciaio and Ilta Inox designed according to ISO 14001.







### Licences, approvals and product certifications:

### Type of certification

AD Merkbaltt W 0/TRD 100

EC marking in conformance with Directive Steel for structural 89/106/CEE of the EC Council of 21/12/88

Authorisation decree DM 9/1/96 by the Public Works Ministry for construction steels.

### Field of application

by

Pressure vessels and boilers

TÜV

Steel for structural applications as per EN 10025-2

IGQ

Metallic constructions

# Acciaieria Arvedi



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### NOTE:

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