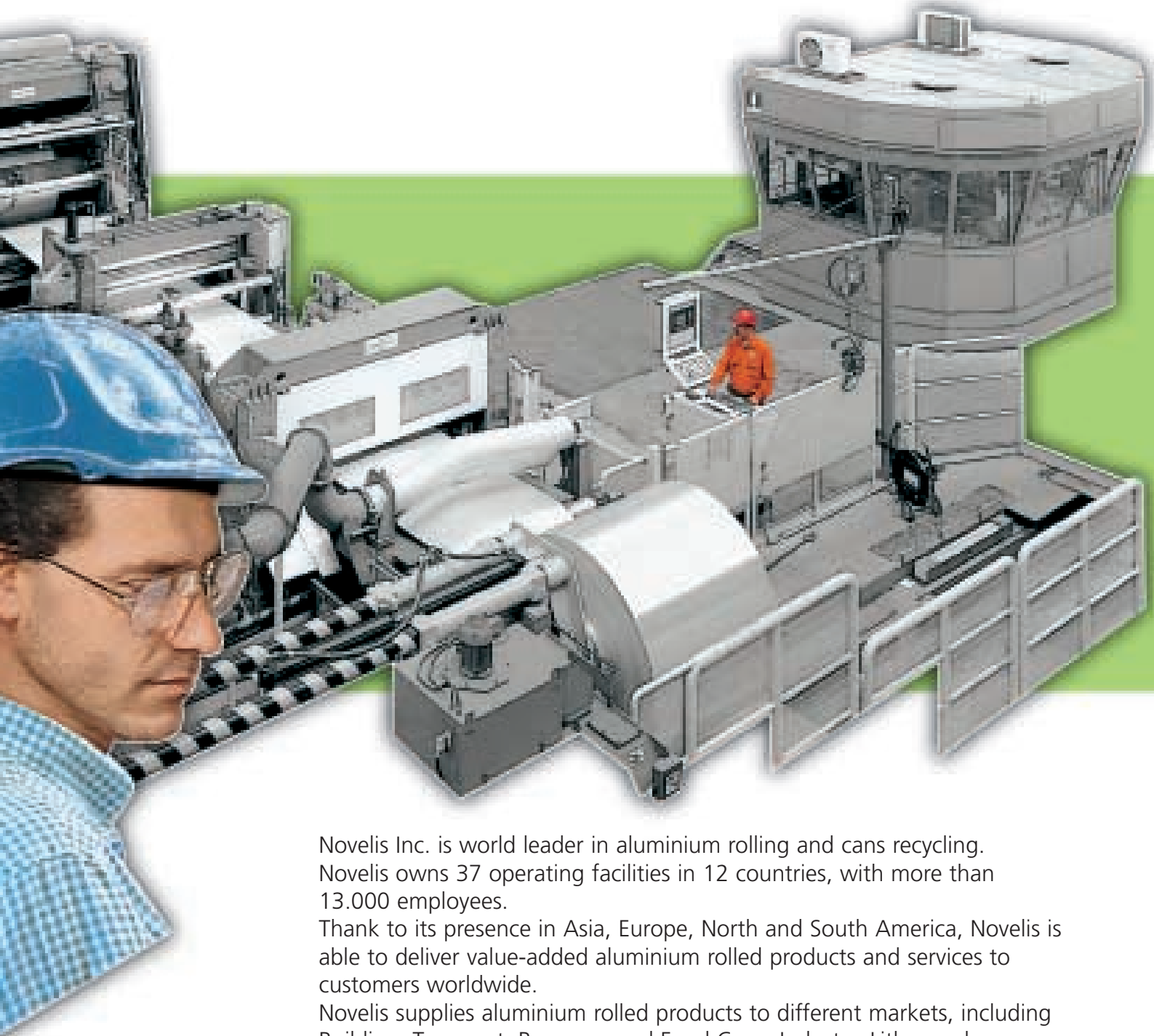


STOCKAL[®]

Prepainted
aluminium
rolled
products
for building
and industrial
applications





Novelis Inc. is world leader in aluminium rolling and cans recycling. Novelis owns 37 operating facilities in 12 countries, with more than 13.000 employees.

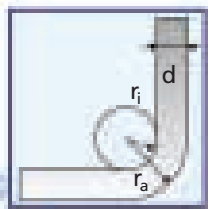
Thank to its presence in Asia, Europe, North and South America, Novelis is able to deliver value-added aluminium rolled products and services to customers worldwide.

Novelis supplies aluminium rolled products to different markets, including Building, Transport, Beverage and Food Cans, Industry, Lithography and Printing.

Novelis Group is an important reality in Italy, too. There are two plants near Milan - Bresso and Pieve Emanuele - and one near Turin - Borgofranco d'Ivrea. Novelis' Bresso plant produces prepainted rolled products using a range of paints and surface finishes. Pieve plant produces aluminium coil and sheet. It is equipped with casters and cold rolling facilities. Finally, at its plant in Borgofranco d'Ivrea, Novelis recycles scrap aluminium. Novelis is present on the whole Italian market thank to its four sales centres in Verona, Bologna, Florence and Rome.



d Material
r_i Internal bending ray
r_a External bending ray



$$r_i = 1,5 \times d$$

STOCKAL® is the Novelis brand name for its aluminium sheet pre-painted with polyester based liquid paints. STOCKAL® is eminently suitable for use in the building industry, especially for façade cladding and window flashings. The wide range of colours and the extraordinary workability of the aluminium substrate make STOCKAL® the most versatile material produced by Novelis.



Drilling



Calendering



Gluing



Bending operation

STOCKAL® is characterised by an extraordinary degree of workability. Thanks to its chemical and mechanical characteristics, due to the combination of an EN AW 5010 alloy and polyester based liquid paints, STOCKAL® can be easily worked using the main mechanical working processes: bending, drilling, milling and cutting; these are only part of the standard working processes for STOCKAL®. The use of a special protective liquid coating on the reverse side also makes STOCKAL® suitable for gluing and bonding.



This colour chart includes proposals of pre-painted aluminium colours available in matt, demi and high gloss versions. It is possible to realise pre-painted aluminium coils on sample bases. The colours are as close as printing technique allows. We suggest to ask for an original painted aluminium sample.

Technical Sheet - STOCKAL®			
Product description			
Aluminium alloy:	-	EN AW-5010	according to EN 573/3
Metal gauge:	[mm]	1.00 - 2.00	
Temper:	-	H42	accor. to int. standards
Coating top side:	-	Polyester paint	accor. to int. standards
Backing coat:	-	Protective lacquer	accor. to int. standards
Metal specification			
Mechanical properties after coating - transverse to rolling direction (according to internal standards)			
Rm:	[MPa]	110 - 150	
Rp0.2:	[MPa]	90 min	
A50:	[%]	5 min from 1.00 mm up to 1.50 mm - 6 min over 1.50 mm up to 2.00 mm	
Tolerance on dimensions:		Gauge	according to EN 485/4
		Width and Length	according to EN 485/4

CERTIFICATES

Health and Safety Management System:

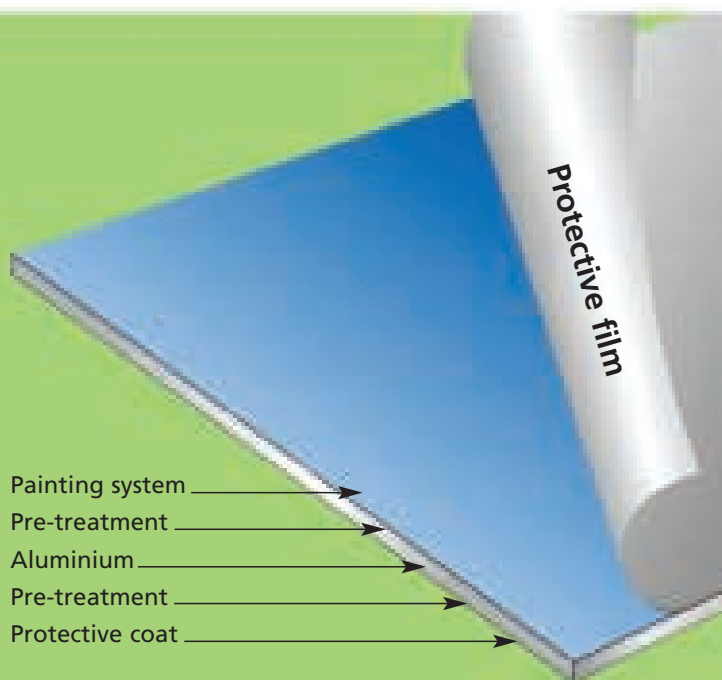
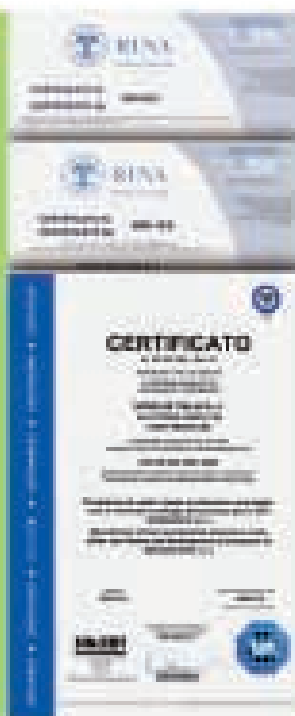
BSI OHSAS
18001; 1999

Environment Management System Certificate:

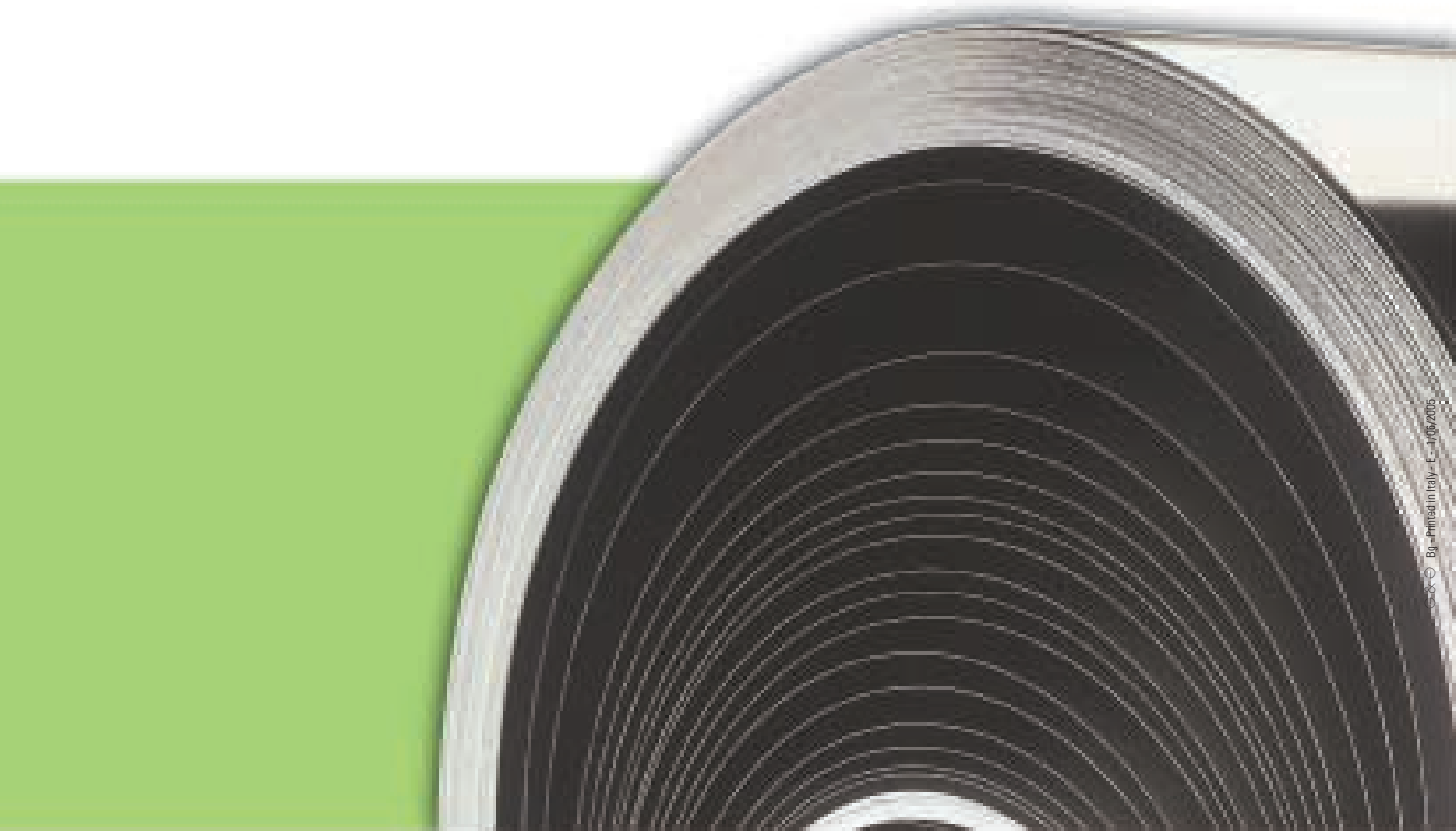
UNI EN ISO
14001; 1996

Quality Management System Certificate:

UNI EN ISO
9001; 2000



Technical Sheet - STOCKAL®				
Pre-treatment				
Degreasing and chromium free treatment on top and reverse side				
Organic coating specification (according to ECCA and EN 1396)			Top side	Backing coat
Coating system:			Polyester	Polyester
Typical coating thickness:	ECCA T1	[µm]	22	4 approx.
Pencil hardness:	ECCA T4	KOH-I-NOR	H	not relevant
Specular gloss to 60°:	ECCA T2	[units]	10 - full gloss	30 - full gloss
Adhesion 90°/180°:		[%]	100	not relevant
Adhesion on cross hatch + impact:		[%]	100	100
M.E.K. / Solvent rubbing test:	ECCA T11	double rubs	150	> 50
Resistance to rapid deformation:	ECCA T5	[cm/kg]	32	not relevant
Resistance to craking on bending:	ECCA T7	-	1.0 T from 1.00 mm up to 1.20 mm 1.5 T over 1.20 mm up to 1.50 mm 2.0 T over 1.50 mm up to 2.00 mm	



© 2008 Novelis. All rights reserved. Printed in Italy. E-7062015

Novelis Italia

Via V. Veneto, 106
20091 Bresso (MI)

Tel.: ++39 02 61454.1
Fax: ++39 02 61454.208
e-mail: info.bresso@novelis.com
web: www.novelispainted.com