



Avflex

GLOBAL TECHNOLOGY – LOCAL SERVICE



ADVANCED FLEXOGRAPHIC DOCTOR BLADES & SEALS



NATURALLY SCIENTIFIC



1300 859 960 or +61 2 9748 2577



salesav@grogangroup.com



Avflex, 108-110 Carnarvon St, Silverwater NSW 2128



Avflex
GLOBAL TECHNOLOGY – LOCAL SERVICE

www.avflex.com.au

STEEL GRADES

Red Label

TOP quality carbon
Swedish steel
SELECTED refined
chemical composition
HIGH CONSISTENCY
carbide dispersion
STRICTEST tolerances



Blue Label

EXTRA FINE carbon
Swedish steel
SPECIAL metallurgical
structure
UNIFORM & MINIMAL
carbide size
EXTREMELY PURE
chemical composition



Black Label

NEW high carbon
alloyed Swedish steel
SUPER REFINED
structure for the most
uniform wear
INNOVATIVE hardening &
tempering process for an
increased wear abrasion
resistance
IMPROVED doctoring
precision and superior
lasting



Gold Label

LONG LIFE micro
alloyed high density
Swedish steel
UNIQUE
chemical composition
HIGHEST wear resistance
IDEAL for long runs and
very abrasive inks



Silver Label

STAINLESS extra fine
Swedish steel
TOTAL oxydation and
corrosion protection
HIGH wear resistance
PERFECT for water
based inks and to solve
rust problems



White Label

PLASTIC & COMPOSITE
with medium & high
density
OPTIMAL flexibility and
adaptability
GOOD wear resistance
at medium working
speed
SPECIFIC for corrugated
printing with water
based inks



TECHNICAL DATA

RED LABEL printing doctor blades (high carbon steel)

Surface:	bright polished
Tensile strength:	1960 ± 100 N/mm ² (580 Hv)
Straightness maximum deviation:	1,0/3000 mm

BLUE LABEL printing doctor blades (high carbon steel Cr added)

Surface:	bright polished
Tensile strength:	1960 ± 100 N/mm ² (580 Hv)
Straightness maximum deviation:	0,6/3000 mm

BLACK LABEL printing doctor blades (high carbon alloyed steel)

Surface:	bright polished
Tensile Strength:	2060 ± 100 N/mm ² (605 Hv)
Straightness maximum deviation:	1,0/3000 mm



GOLD LABEL printing doctor blades (micro alloyed steel)

Surface:	yellow polished
Tensile strength:	2100 ± 100 N/mm ² (615 Hv)
Straightness maximum deviation:	1,3/3000 mm



SILVER LABEL printing doctor blades (stainless steel)

Surface:	bright polished
Tensile strength:	1910 ± 100 N/ mm ² (565 Hv)
Straightness maximum deviation:	1,1/3000 mm

ALL LABELS

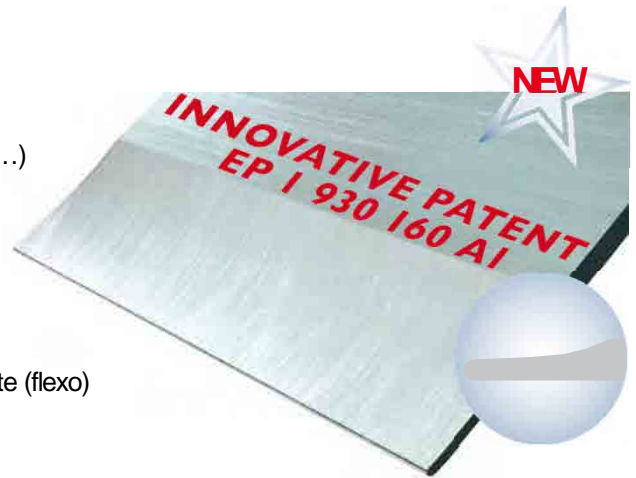
Flatness maximum deviation:	0,3% across the strip width
Width tolerance (blade):	± 0,10 mm if blade width < 50 mm ± 0,15 mm if blade width ≥ 50 mm
Thickness tolerance (blade):	± 0,009 mm if blade thickness ≤ 0,152 mm ± 0,011 mm if blade thickness > 0,152 mm
Width tolerance (lamella):	± 0,025 mm
Thickness tolerance (lamella):	± 0,003 mm
Contact edge roughness:	Ra 0,10 ± 0,05 µm

SPECIAL EDGE PROFILES



WING LAMELLA®

- Special pre-honed doctor blades
- EXTREMELY HIGH printing definition (tiny letters, pictures, drawings...)
- LONGER lamella life
- SLOWER & MORE UNIFORM blade wear
- REDUCED lamella bending: real working angle equal to nominal
- ELIMINATION of steel burrs & slivers (flexo)
- BETTER chamber sealing with consequent less ink spilling and waste (flexo)
- LESS oscillation-bound cracks (gravure)
- QUICK run-in time thanks to rounded tip Mirror Edge®



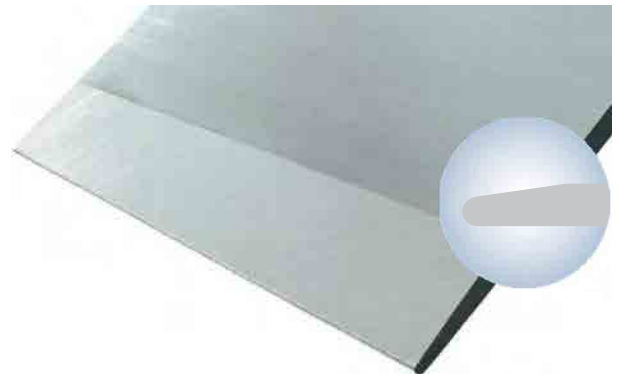
SC - LAMELLA

- Standard pre-honed doctor blade
- EXCELLENT printing definition under all conditions
- FULLY SATISFACTORY ratio lasting-quality
- QUICK run-in time thanks to rounded tip Mirror Edge®



TMC - BEVEL

- Straight bevel pre-honed doctor blade
- IDEAL blade for high pressure working conditions (minimal blade deformation)
- PERFECT for short jobs
- QUICKEST run-in time thanks to very thin rounded tip Mirror Edge®



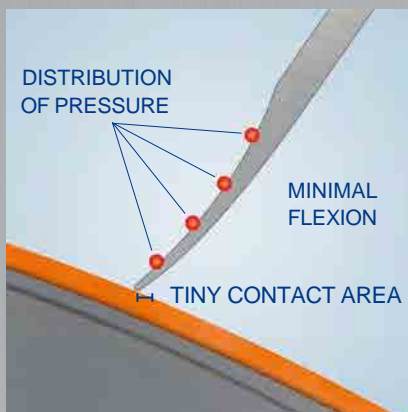
N - ROUND EDGE

- Rounded edges doctor blade
- HIGHEST blade rigidity
- LONG lasting
- Slow run-in time (depending on thickness)
- Medium printing definition
- SUGGESTED for full tones & anilox with few lines/cm



WING LAMELLA®: Boost your Printing Quality

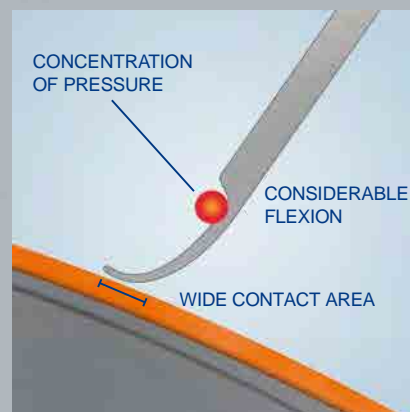
EP1930 160 A1



WING LAMELLA®

INNOVATIVE PATENT
EP 1 930 160 A1

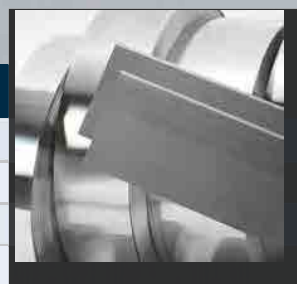
STANDARD LAMELLA



COMMON SIZES

STEEL

THICKNESS mm	WIDTH mm
0,065	10
0,076	10
0,102	10-15-30-40-50-60
0,152	8-8,5-10-12,7-15-17-19-20-22-25-25,4-28,6-30-32-35-38,1-40-41,3-45-50-52-50,8-55-60-63-65-70-80-90
0,203	10-12,7-15-17-19-20-25-25,4-28,6-30-32-35-38,1-40-45-50-52-55-60-70-80
0,254	20-25-25,4-28,6-30-32-35-38,1-40-50-60
0,305	20-30-35-40-50-55-60-70-80-90
0,381	40-50-60



PLASTIC

THICKNESS mm	WIDTH mm
0,35	20-25-30-32-35-40-45-50-60
0,50	25-30-32-35-40-45-50-60
0,80	25-30-32-35-38-40-45-50
1,30	25-30-32-35-38-40-45-50
1,60	25-30-32-35-38-40-45-50
2,00	25-30-32-35-38-40-45-50

SIZE AND PROFILE RANGE

Blade Profile	Width (mm)	Thickness (mm)	Profile Specifications	
			Range	Standard
WING	from 8 to 90	0,102	Lamella 1,0 min - 4,0 max mm x from 0,04 mm	Thickness 0,152 mm: 2,47 x 0,065 mm
		0,152		
		0,203		Thickness 0,203 mm: 2,86 x 0,095 mm
		0,254		
		0,305		Thickness 0,254 mm: 3,20 x 0,125 mm
		0,381		
SC	from 8 to 90	0,102	Lamella 0,5 min - 2,5 max mm x from 0,04 mm	Thickness 0,152 mm: 1,3 x 0,068 mm
		0,152		
		0,203		Thickness 0,203 mm: 1,3 x 0,100 mm
		0,254		
		0,305		Thickness 0,254 mm: 1,3 x 0,130 mm
		0,381		
TMC	from 8 to 90	0,102	Bevel from 2° to 60°	4° & 15°
		0,152		
		0,203		
		0,254		
		0,305		
		0,381		
N	from 8 to 90	0,065	Round	radius = ½ thickness
		0,076		
		0,102		
		0,152		
		0,203		
		0,254		

Custom-made sizes and/or edge profiles are available upon request

SPECIAL COATINGS



G

CERAMIC high density coating
(innovative technology)
STABILISATION of chrome surface roughness
HIGHEST printing definition and quality
SOLUTION for all veiling troubles
STRONG LUBRICATION of blade contact surface
INCREASED wear resistance
LONGEST LASTING



G PLUS

HIGHEST concentration of ceramic particles
SPECIFIC for chrome major roughness problems
SOLUTION for worst veiling troubles
IDEAL for cylinders partially engraved
ELIMINATION of chrome polishing effect



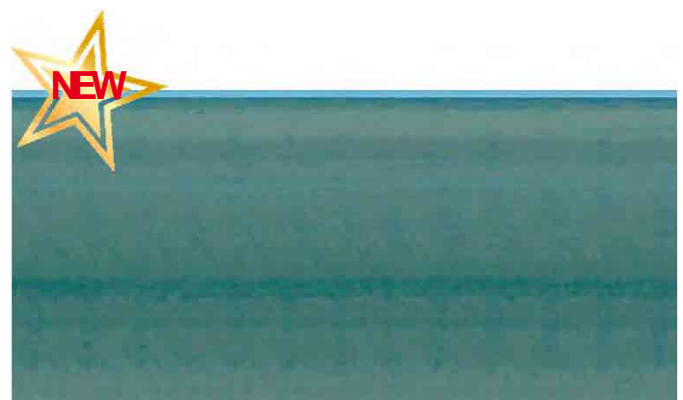
G KIND

INCREASED ADAPTABILITY of ceramic coating layer
IMMEDIATE start up
IDEAL for high quality short runs
SUITABLE for cylinders with below average hardness



G HARD

INCREASED WEAR RESISTANCE
IMPROVED surface hardness
LONGEST runs
IDEAL for extremely long jobs without blade change



SPECIAL COATINGS



SUPER

LONG LASTING lubricant coating specific for flexo
HIGH wear resistance
LOW friction blade/cylinder
IMPROVED anilox life
TOP printing quality
VERY LONG LASTING (beyond 1'100'000 m)
IDEAL for abrasive inks



IRIDIUM

LUBRICANT coating specific for flexo
LOWEST friction blade/cylinder
IMPROVED anilox life
LONG LASTING (beyond 500'000 m)
HIGH printing definition
TOTAL SHIELD against rust & corrosion
IDEAL for water based inks



ICE

SUPER LUBRICANT ceramic coating
ENRICHED chemical composition
VERY LOW friction
COOL working temperature
SELF CLEANING surface
IDEAL for cold seal & thick inks



F

EXTRA HARD coating specific for flexo
SELF LUBRICANT properties
TOP printing definition
EXTREME wear resistance
IDEAL for abrasive, thick and gripping inks

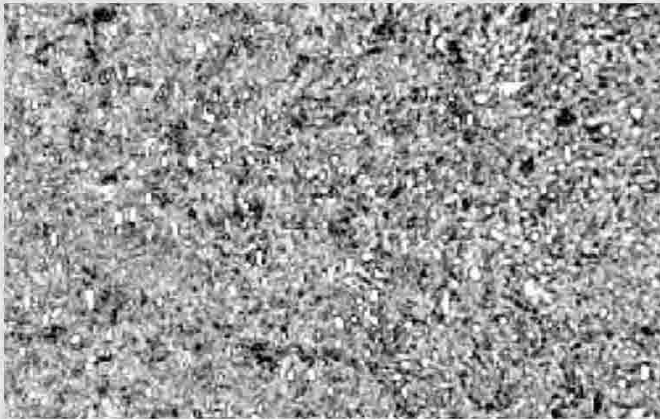


A 1st CLASS BLADE

METALLURGICAL STRUCTURE & CARBIDE DISPERSION

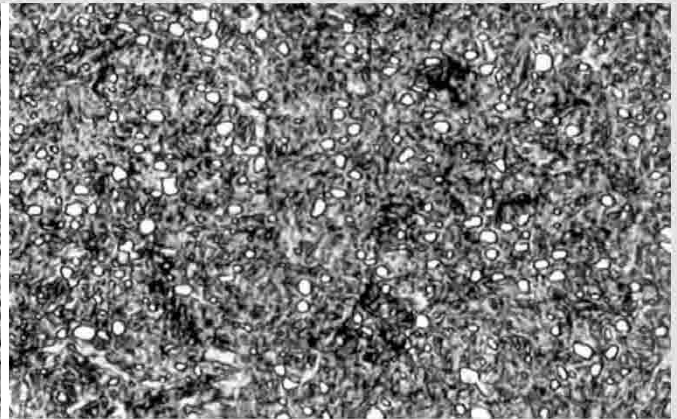
Uniform & slow blade wear depend on:

- Pure chemical composition
- Small size of carbides
- High density (no porosity)
- Lack of non metallic inclusions
- Fine carbide dispersion through steel section
- Undifferentiated metallurgical structure



SUPER REFINED

1000x



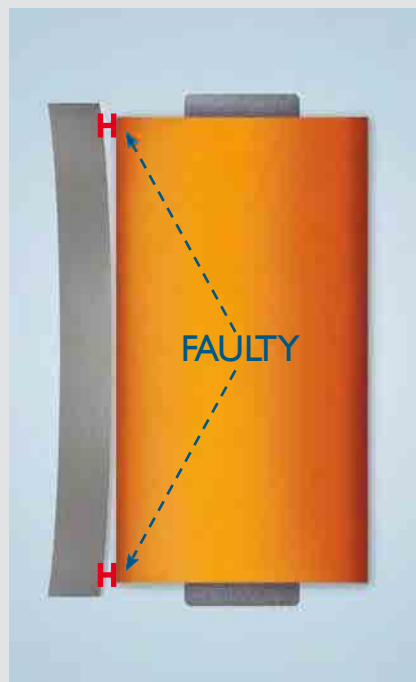
STANDARD

1000x

STRAIGHTNESS

Strict straightness tolerance:

- perfect parallelism blade-cylinder
- low working pressure
- uniform blade wear all through its length
- long blade lasting



FLEXO SEALS

High precision seals with strict tolerances made of 5 different FOAM grades suitable for all applications (solvent base, water base, UV) aimed to a proper ink chamber sealing and a long lasting (up to 250-300'000 m runs).

Seals are produced with any shape on demand, using CNC technology with high cutting precision which grants a smooth contact surface seal-cylinder.

Extreme flexibility in manufacturing out of samples and drawings as well as in modifying shapes & sizes.



FOAM GRADES

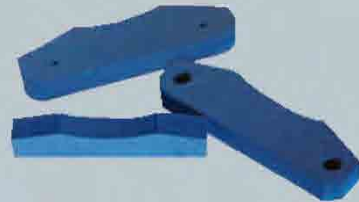
FLEXO 1

medium hardness & medium density
most commonly used



FLEXO 2

high hardness & medium density
high working pressure



FLEXO 3

medium-low hardness & high density
very high wear resistance



FLEXO 4

medium-low hardness & medium density
very high wear resistance



FLEXO 8

low hardness & low density
medium working pressure



SPECIAL FLEXO SEALS

SELF LUBRICANT SEALS

REVOLUTIONARY self lubricant seals.
Seals are impregnated with lubricant oil to reduce friction & covered with a shell of solid rubber to bear any working pressure.
Lasting beyond 1'500'000 m runs.



COATED SEAL x000

Special anti-friction coating to improve seal life x 3-4 times.
Ideal combination with FLEXO 3 & 4 foam grades. Lasting beyond 800'000 m.



DOUBLE COMPONENT SEAL

Specific for High Speed Presses & Very Long Runs (to be used in combination with CBG ACCIAI Coated Blades range selection).
Outstanding performance compared to any conventional seal.
ZERO LEAK factor. Save ink. Keep press clean.
Available for any press model.



COMMON SHAPES

QUALITY CERTIFICATE

Certificate N. IT98/0277

SGS

The quality management system of

C.B.G. ACCIAI S.r.l.

Head Office and Plant :
Via G. Carducci, 680 - 21042 CARONNO PERTUSELLA (VA) - Italy



has been assessed and certified as meeting the requirements of

ISO 9001 / UNI EN ISO 9001:2008

For the following activities

**Production of pre-sharpened and not pre-sharpened steel blades for
rotogravure printing, flexographic printing, silk-screen printing,
coating, refining and coupling machines.**

EA Sector: 17

This certificate is valid from 30/01/2011 until 30/01/2014 and
remains valid subject to satisfactory surveillance audits.
Re certification audit due before 30/01/2014.
Issue.7. Certified since 23/12/1998.

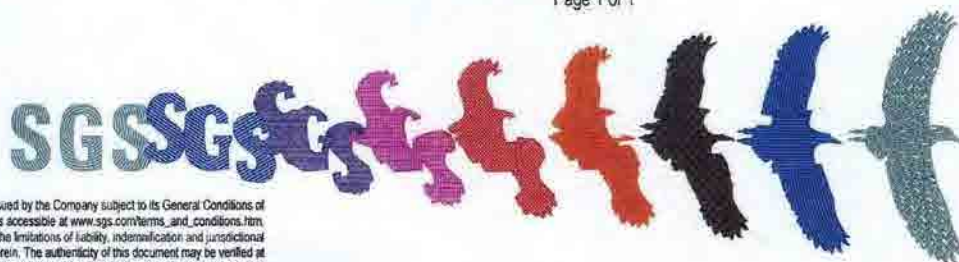
Further clarifications regarding the scope of this certificate and the applicability of
ISO 9001:2008 requirements may be obtained by consulting the organization.



Authorized by
Paolo Pineschi

SGS ITALIA S.p.A. - Systems & Services Certification
Via G. Gozzi, 1/A 20129 MILANO - Italy
t +39 02 73 93 11 f +39 02 70 10 94 89 www.sgs.com

Page 1 of 1



This document is issued by the Company subject to its General Conditions of
Certification Services accessible at www.sgs.com/terms_and_conditions.htm.
Attention is drawn to the limitations of liability, indemnification and jurisdictional
issues established therein. The authenticity of this document may be verified at
http://www.sgs.com/certified_clients.htm. Any unauthorized alteration,
forgery or falsification of the content or appearance of this document is unlawful
and offenders may be prosecuted to the fullest extent of the law.

PACKAGING

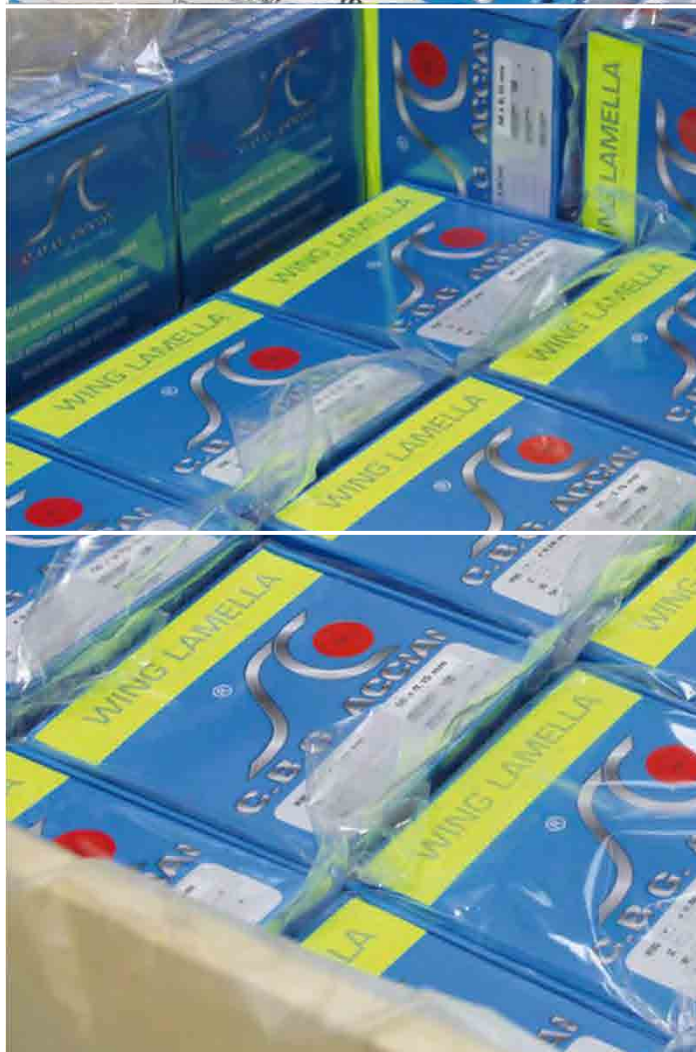


PROFESSIONAL safe & heavy packaging

PLASTIFIED water proof cardboard

SMOOTH & EASY blade's pull out

VACUUMWRAPPING for extreme protection



RACLE AUTOAFFILANTI PER ROTOCALCO & FLESSOGRAFIA
PRINTING DOCTOR BLADES FOR ROTOGRAVURE & FLEXO
UCHILLAS AUTOFILANTES POR HUECOGRAVADO & FLEXOGRAFIA
RACLES PRÉAFFUTÉES POUR HÉLIO & FLEXO
ELBSTSHÄRFENDE RAKELSTÄHLE FÜR TIEFDRUCK & FLEXODRUCK
LAMELLAS PARA ROTOGRAVURA & FLEXOGRAFIA