### WALL COLMONOY GLASS CONTAINER INDUSTRY





**Wall Colmonoy** is a global materials engineering group of companies engaged in the manufacturing of surfacing and brazing products, and engineered components across aerospace, automotive, glass container, oil & gas, energy and other industrial sectors.

Known for our unique proven way of creating superior performing alloys that enhance engineered components, we pride ourselves on long-term strategic customer collaboration that produces value-added ideas and creative solutions.

Combining over 75 years of engineering technology with a progressive, visionary outlook, Wall Colmonoy offers customers trusted, customized expertise that results in smart innovation and shared growth.

**PROGRESSIVE COLLABORATION FOR SUPERIOR PERFORMANCE. WORLDWIDE.** 



### WALL COLMONOY GLASS CONTAINER INDUSTRY

The pioneer and leading developer of Surfacing Alloys for the Glass Container industry, Wall Colmonoy has been protecting and restoring glass moulds for over 70 years.

Wall Colmonoy provides specially formulated wear-resistant **COLMONOY®** (nickel-based) and **WALLEX™** (cobaltbased) Surfacing Alloys including Tungsten Carbide Composite alloys for Plunger Manufacture.

**COLMONOY®** and **WALLEX™** have outstanding metallurgical and physical properties which extend the life of parts subject to wear & corrosion. The alloys are applied by a wide range of techniques, including PTA, HVOF, spray and fuse, powder welding, and Laser Cladding. Wall Colmonoy also manufactures equipment to apply Colmonoy, Wallex, or other hard surfacing alloys. Wall Colmonoy's **Fusewelder® Torch** and **Spraywelder™ System** were specially developed to extend the service life of glass mould components.

Our manufacturing facilities in North America and Europe are equipped with modern laboratory and testing facilities. Our products are manufactured to quality standards set by international and national industrial associations. We maintain quality assurance to ISO 9001.



### **APPLICATION OVERVIEW**

ALLOY	HRc	PTA	FUSEWELDER	HVOF	SPRAYWELDER	LASER	SUGGESTED USES	
Colmonoy 225	13-17		¥				Edges	
Colmonoy 23A/24	16-23		¥				Guide rings, baffles	
Colmonoy 226	18-21		¥				Blow heads, edges and repairs blow-blow plungers, guide rings, baffles	
Colmonoy 215	20-24	~					Grey cast iron or aluminum bronze mould	
Colmonoy 323	20-25		~				Cast iron parts	
Colmonoy 227	22-27		¥				Bottom plates	
Colmonoy 21	22-27		<b>v</b>				Bottom plates, baffles, guide rings, blow heads	
Colmonoy 229	27-32		~				Bottle moulds, cast iron parts	
Colmonoy 21A	28-32	¥	¥			¥	Neck rings, guide rings, general purpose	
Colmonoy 228	28-33		¥				Guide sleeves, preform blanks, bottom plates, funnels	
Colmonoy 22	28-33		¥				Bottle moulds, cast iron parts	
Colmonoy 133	30-35					¥	Neck rings, general purpose	
Colmonoy 234	32-36		¥				Neck rings, blow-blow plugs	
Colmonoy 237	35-38		¥				Neck rings, blow-blow plugs	
Colmonoy 42	35-40	¥			~		Plungers, blank moulds, blow moulds, bottom plates, guide rings and baffle plates	
Colmonoy 43	35-40		¥	~			Bottom plates, guide rings	
Colmonoy 53	42-53		¥	~			Plungers, blank moulds, blow moulds, bottom plates, guide rings and baffle plates	
Colmonoy 52	45-50	~			¥		Plungers, blank moulds, blow moulds, bottom plates, guide rings and baffle plates	
Colmonoy 705	56-63		¥				Plungers	
Colmonoy 62	57-63				¥		Plungers	
Colmonoy 63	57-63		¥	¥			Plungers	
Colmonoy 72	57-62	~			¥	¥	Plungers	
Colmonoy 88	59-64	~	~	~	¥	V	Plungers	

Wallex 40	41-46	¥	V	¥	¥	¥	Plungers
Wallex 50	56-61	¥	V	¥	<b>v</b>	¥	Plungers

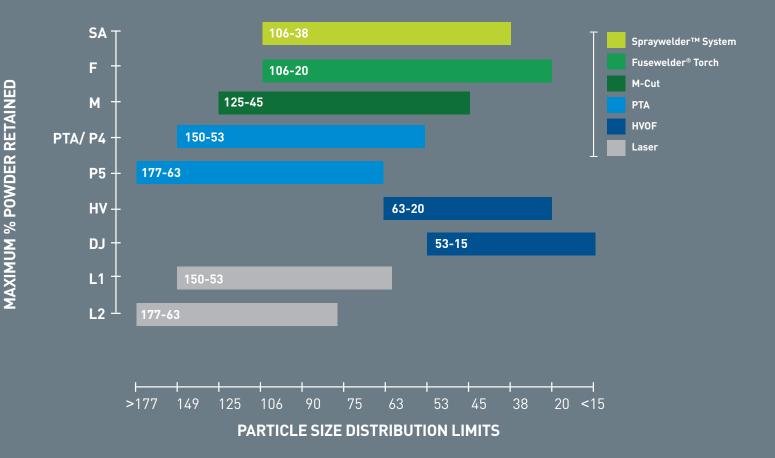
For additional information please refer to our Selector Charts



# PARTICLE SIZE RANGE

**COLMONOY**<sup>®</sup> SURFACING ALLOYS ARE AVAILABLE IN A RANGE OF SIZES DESIGNED TO MEET YOUR REQUIREMENTS.

EQUIPMENT	NOMINAL PARTIC	LE RANGE (µm)	MESH SIZE		
Spraywelder™ J-3 System	106 - 38		140 / 400		
Fusewelder™ Torch	106 - 20		140 / 625		
M-Cut	125 - 45		120 / 325		
Plasma Transferred Arc (PTA)	<b>PTA/P4:</b> 150 - 53	<b>P5:</b> 177 - 63	PTA/P4: 100 / 270	<b>P5:</b> 80 / 230	
HVOF	<b>HV:</b> 63 - 20	<b>DJ:</b> 53 - 15	HV: 230 / 635	<b>DJ:</b> 270 / 700	
Laser	<b>L1:</b> 150 - 53	<b>L2:</b> 177 - 63	L1: 100 / 270	<b>L2:</b> 80 / 230	



# **COLMONOY® SURFACING ALLOYS**

REPAIR AND PROTECTION OF GLASS MOULDS

### Range of alloys specifically designed for the Glass Container Industry for repair and protection of glass moulds.

After decades of extensive research and field tests, Wall Colmonoy developed a new generation of wear-resistant alloys specially formulated for the glass container industry.

**COLMONOY®** surfacing alloys are nickel-based powders containing special wetting agents which produce high bond-strength deposits with virtually no overspray adherence. The alloys provide porosity-free, low coefficient-of-friction finishes for producing high-quality glass products.

**COLMONOY®** alloys bond to most base metals including cast iron, carbon steels, stainless steels, aluminium-bronze alloys and nickel. The extremely low application temperature permits faster and easier weld overlays.

Available as **Fusewelder™** powder for application with Wall Colmonoy's **Fusewelder™ Torch**. **COLMONOY®** alloys are effective on a variety of components.

### ALLOYS FOR COST SAVING AND INCREASED PRODUCTIVITY

#### APPLICATION

- Powders optimized for application method -Laser, PTA, HVOF, Fuseweld<sup>™</sup>, Spray & Fuse
- Minimal preheating
- Fast wetting action
- Low bonding temperatures

#### FINISHING

- By turning, milling and polishing
- Smooth finish

#### PERFORMANCE

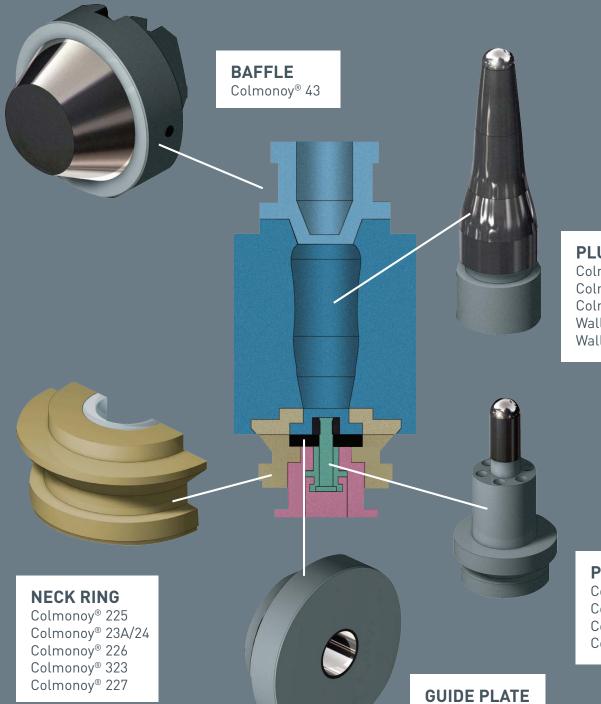
- Extended mould life
- Resistant to hot wear and abrasion
- Facilitates Repairs

#### REPAIR

• Superior hot stiff build-up, minimal overspray, quickly and easily filed

#### PROTECTION

• Superior wetting properties and deposits, easily machined to smooth, glass-like finishes.



#### PLUNGER

Colmonoy® 52 Colmonoy<sup>®</sup> 62 Colmonoy<sup>®</sup> 42 Wallex<sup>™</sup> 40 Wallex™ 50

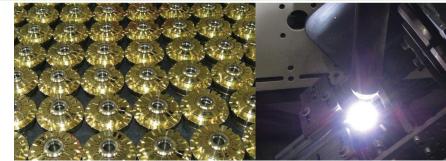
Colmonoy<sup>®</sup> 227 Colmonoy<sup>®</sup> 228 Colmonoy<sup>®</sup> 42

PLUG Colmonoy<sup>®</sup> 42 Colmonoy<sup>®</sup> 52 Colmonoy<sup>®</sup> 62 Colmonoy<sup>®</sup> 88

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#### WORLD HEADQUARTERS

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#### WALL COLMONOY. PROGRESSIVE COLLABORATION FOR SUPERIOR PERFORMANCE. WORLDWIDE.

CINCINNATI | LOS LUNAS | OKLAHOMA CITY | PUNE (INDIA) | WALES (U.K.) | WINDSOR (CANADA)

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