



POLYCAST INDIA

Capabilities
Location
Services





Bhavnagar Rajkot Ahmedabad



Gujarat is a state in Western India, It has an area of 196,024 km² with a coastline of 1,600 km, most of which lies on the Kathiawar peninsula, and a population in excess of 60 million. The state is bordered by Rajasthan to the north, Maharashtra to the south, Madhya Pradesh to the east, and the Arabian Sea and the Pakistani province of Sindh to the west. Its capital city is Gandhinagar, while its largest city is Ahmedabad. Gujarat is home to the Gujarati-speaking people of India.

Journey start with the tool maker

Design

Spark arrowed & Machining

Finish

Our tool makers are pushing the boundaries for advanced tool making



Investment Casting Foundry

Bhavnagar



Wax injection



Tree preparation & build

It all about the wax
Starting the process
with a quality wax is
one of the more
important stages to
producing a perfect
finished detail



The care and skill if
the assembly team
allows a better pore
and blemish free
castings



Coating / Building and drying the shell



Ready to pour

The ceramic shell is built up with layers of slurry combined the fine and course silica sand before drying

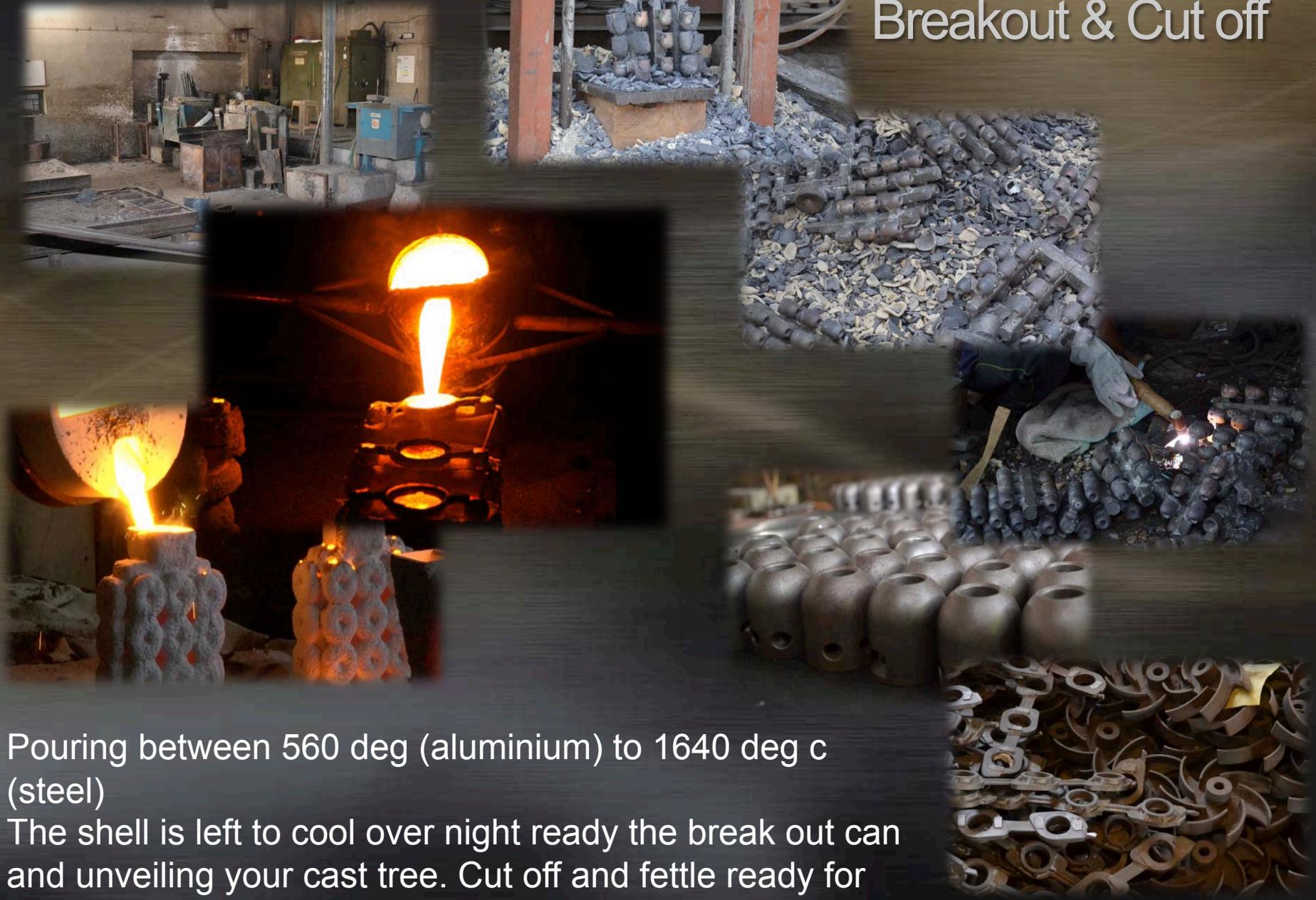
High pressure autoclave is used to remove the wax from the shell and it is ready to pour.

The shell is fired up to 900 degrees ready for your choice of alloy



Hot Pour

Breakout & Cut off



Pouring between 560 deg (aluminium) to 1640 deg c (steel)
The shell is left to cool over night ready the break out can and unveiling your cast tree. Cut off and fettle ready for finishing.

Tumble, Polish & Finishing



The Castings go through a series process including barrel rolling, shot blast and hand fettling to ensure the best finish for the next process.

Electro to Mirror finish and polish

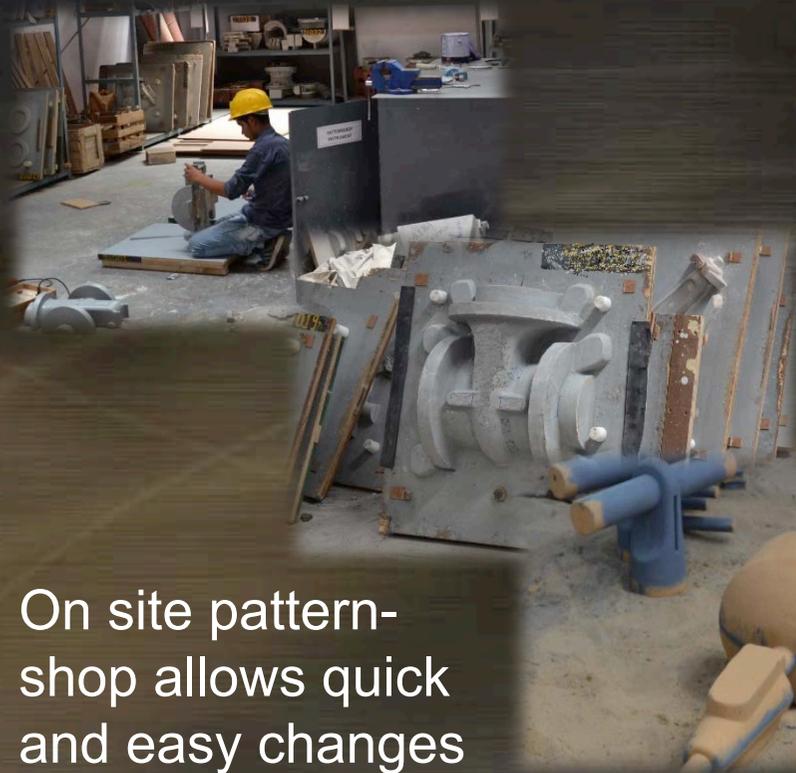


From basic electro polish to a super yacht shine our skilled polishing team can produce a quality polished finish of the highest standards.

Polycast Ltd are famous for our Investment casting capability. But via our growing network and buying power Polycast are able to offer the same quality service for other metal forming solutions.

- Forging
- Sand Casting
- Low and High pressure die casting
- Specialist machining

Sand Casting



On site pattern-shop allows quick and easy changes to patterns



Building of the sand mould and placing the feeds by hand



The Pour



Sand casting Breakout / Cut off / Finish



Breakout leaving a net shape component with the feeds intact.

Cut back and prepares for machining or polishing.

Forging: Small forge

Polycast offer both large and smaller product forging from you based in Rajkot India

As in other metal forming solution we offer a one stop shop with in-house facilities for post forge machining and finishing.

Hammering using a 50 ton machine the softened metal into shape to produce your net form

A process of heating, hammering and trimming the softened billet or bar.

Sl. No.	Material Grade	Color Name	Color Code
1	8272 (BS17)	WHITE	
2	734 (BS)	BROWN	
3	734 (BS)	WILD PURPLE	
4	734 (BS)	BLACK	
5	734 (BS)	BRIGHT GREEN	
6	734 (BS)	YELLOW	
7	734 (BS)	YELLOW + RED	
8	734 (BS)	BLUE	
9	734 (BS)	GRAY	
10	734 (BS)	YELLOW + BLACK	
11	734 (BS)	RED + GREEN	
12	734 (BS)	DEEP ORANGE	
13	734 (BS)	WHITE + RED	
14	734 (BS)	YELLOW + BLUE	
15	734 (BS)	BLACK + RED	
16	734 (BS)	RED + BLUE	
17	734 (BS)	BLACK + WHITE	
18	734 (BS)	WILD PURPLE + WHITE	
19	734 (BS)	BLACK + WILD PURPLE	
20	734 (BS)	YELLOW + GREEN	
21	734 (BS)	BLACK + DEEP ORANGE	
22	734 (BS)	BLUE + BLACK	
23	734 (BS)	BROWN + BLACK	
24	734 (BS)	WHITE + DARK GREEN	
25	734 (BS)	YELLOW + WHITE	
26	734 (BS)	YELLOW + GRAY	
27	734 (BS)	YELLOW + WILD PURPLE	
28	734 (BS)	BLACK + GREEN	
29	734 (BS)	RED + WILD PURPLE	
30	734 (BS)	BLUE + GREEN	
31	734 (BS)	PINK	
32	734 (BS)	YELLOW + DEEP ORANGE	
33	734 (BS)	GRAY + WILD PURPLE	
34	734 (BS)	GRAY + RED	
35	734 (BS)	BROWN + GREEN	
36	734 (BS)	BLACK + WILD PURPLE	
37	734 (BS)	SKY BLUE	



Choose you grade of material and order your tooling



Forging: Large forge

Hammering capabilities from 280T to the new 400 Ton this heavily industrial process date back hundreds of year. We offer a one stop shop all under one roof for forged metal components

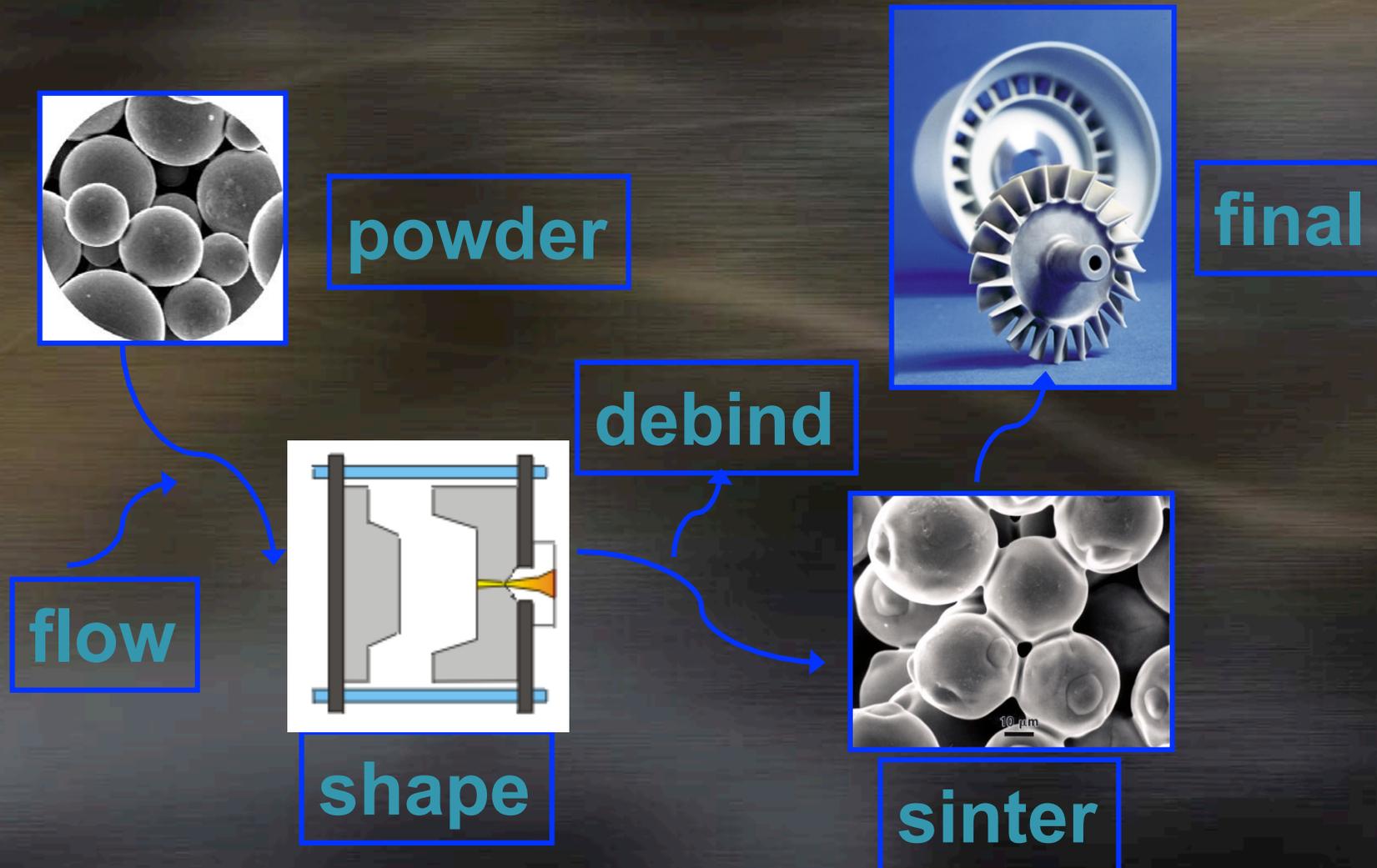


Low and high pressure die cast

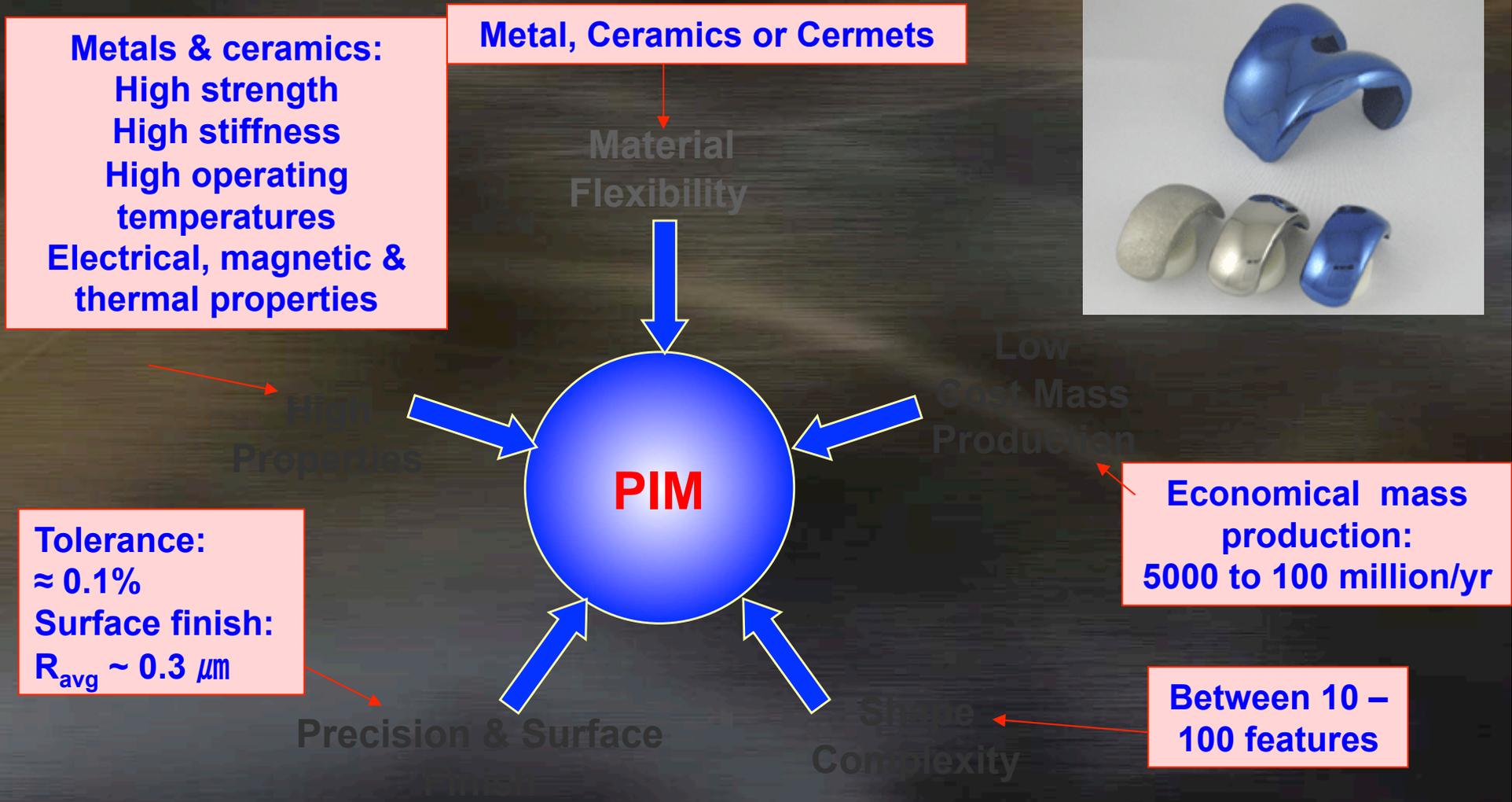




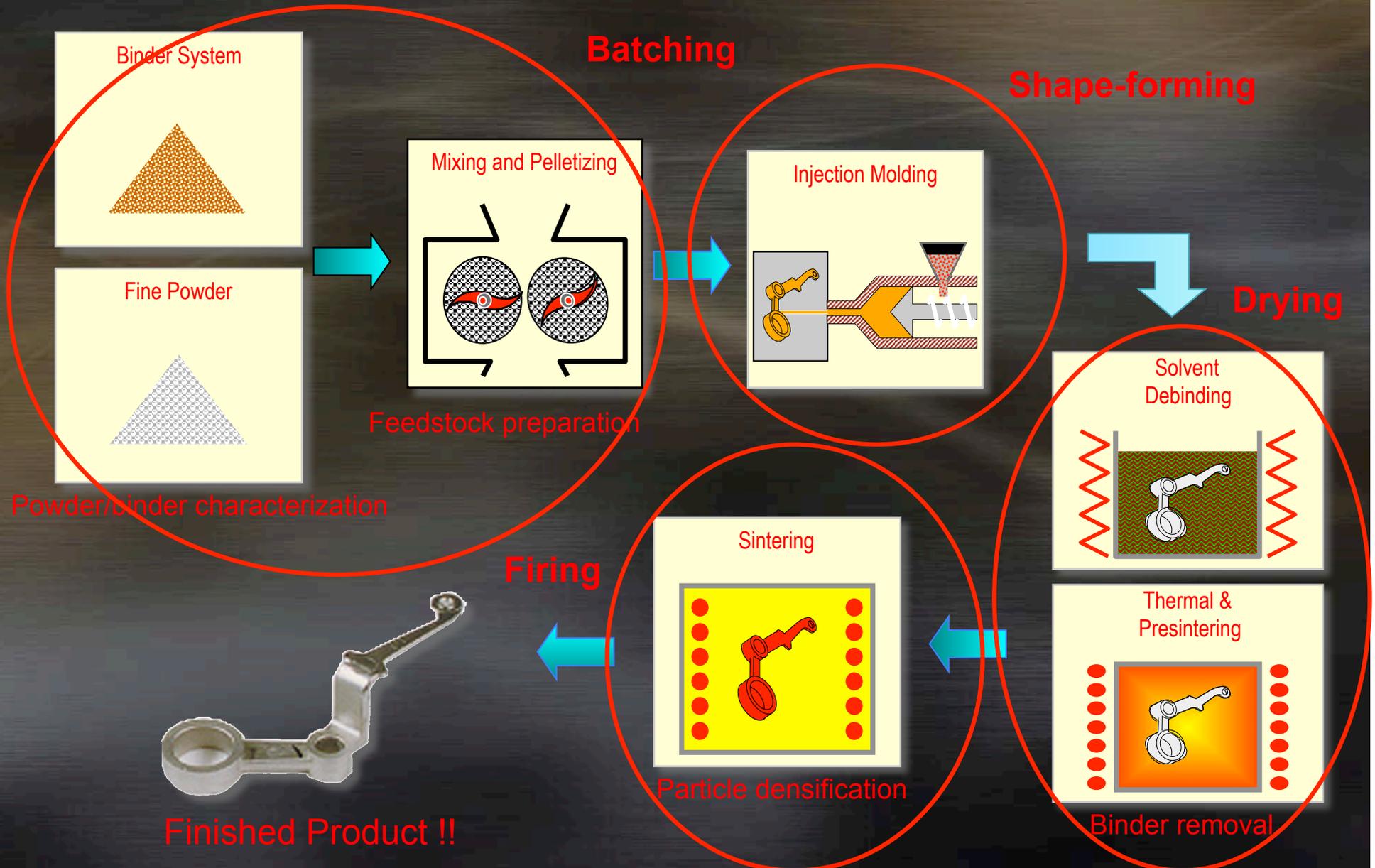
POWDER Injection Molding



Why PIM?



PIM Process





manufacturing quality metal
components in India with
Polycast Ltd.

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Useful links:

Sand casting: https://en.wikipedia.org/wiki/Sand_casting

Investment casting: https://en.wikipedia.org/wiki/Lost-wax_casting

Die Casting: https://en.wikipedia.org/wiki/Die_casting

Forging: <https://en.wikipedia.org/wiki/Forging>

CNC Machining https://en.wikipedia.org/wiki/Numerical_control

Electropolishing <https://en.wikipedia.org/wiki/Electropolishing>

Anodizing <https://en.wikipedia.org/wiki/Anodizing>