

Our quality stems from a careful and rigorous process control. From design to production, each stage is monitored in order to guarantee the correct flow and the final product characteristics.

Our controls start from **RAW MATERIALS**:

Ima employs 100Cr6 high-purity bearing steel from selected suppliers. Each lot is guaranteed and certified through metallographic and mechanical controls.



Example of chemical analysis

Certificato di Prova n.

Test report n.

Tipo di Prova: ANALISI CHIMICA ACCIAI MEDIANTE SPETTROSCOPIA A SCINTILLA

Type of test: Steel chemical analysis by spark spectroscopy

Strumento: Spettrometro Metal Lab Plus ID.261

Equipment: Spectrometer Metal Lab Plus ID.261

Metodo di Prova:

Standard

Data di Esecuzione:

Date of execution

ANALISI:	C %	Si %	Mn %	P %	S %	Cr %	Mo %	Ni %	Al %	Nb %	B %	Cu %
<i>Analysis</i>												
1	0.989	0.213	0.309	0.016	0.007	1.375	0.015	0.047	0.014	0.017	<0.0001	0.132
2	1.014	0.209	0.303	0.004	0.000	1.421	0.019	0.050	0.013	0.016	<0.0001	0.137
3	0.995	0.210	0.318	0.011	0.001	1.426	0.017	0.053	0.014	0.015	<0.0001	0.135
Med.	0.999	0.210	0.310	0.010	0.003	1.407	0.017	0.050	0.014	0.016	<0.0001	0.135
	Co %	Ti %	V %	W %	Zr %	Pb %	Sn %	Zn %	Ca %	Fe %		
1	0.009	0.002	0.003	<0.001	<0.001	0.020	0.004	<0.001	<0.001	96.826		
2	0.006	0.003	0.004	<0.001	<0.001	0.018	0.007	<0.001	<0.001	96.775		
3	0.009	0.003	0.003	<0.001	<0.001	0.009	0.007	0.001	<0.001	96.773		
Med.	0.008	0.003	0.003	<0.001	<0.001	0.016	0.006	<0.001	<0.001	96.792		



Our **THERMAL TREATMENT** ensures quality and uniformity of the required characteristics.

I forni di Trattamento Termico sono impianti dotati di monitoraggio automatico dei tempi di trattamento e delle temperature. Heat treatment furnaces automatically monitor times and temperatures.

Example of metallographic control

Certificato di Prova n.
Test report n.

Tipo di Prova: ESAME MICROSCOPICO MATERIALI FERROSI

Type of test: Microscopic examination of ferrous materials

Strumento: Microscopio metallografico BX51M ID.22

Equipment: Metallographic microscope BX51M ID.22

Metodo di Prova: UNI 3137:1965

Standard

Data di Esecuzione:

Date of execution

ATTACCO:

Etchant

Nital 4

OBIETTIVO:

Lens

100x

FOTOGRAFIA:

Photo

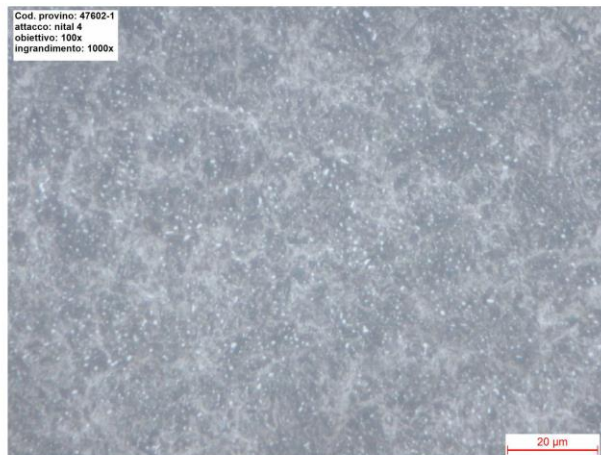


Foto 1 – Microstruttura a cuore
Photo 1 – Core microstructure



Grinding and lapping are performed on latest generation lines capable of achieving very high level of roughness and roundness.

Our laboratories are equipped with roughness and roundness testers through which the process is kept under control.

ASSEMBLY

Automatic assembly line control ensures bearing integrity and the correct amount of grease, while andrometers accurately detect vibration and noise levels.



Ima's modern equipment performs life tests and, upon request, specific checks following customers' instructions.