MODEL GIGAPRESS		NEO 5500	NEO 6100	NEO 8000	NEO 9000
Clamping force	kΝ	55.000	60.000	80.500	90.500
Clamping force	Ton	5.607	6.116	8.206	9.225
Injection dynamic force (2^ phase)	kN	1.000	1.000	1.295	1.295
Injection force with 20 bar counterpressure	kN	3.072	3.072	3.891	3.891
Ejection force	kN	1.238	1.238	1.238	1.238
Max. die height	mm	2.400	2.400	2.600	2.600
Min. die height	mm	1.500	1.500	1.700	1.700
Platens dimensions HxV	mm	3.600x3.600	3.600x3.600	4.100x4.100	4.100x4.100
Tie bar spacing	mm	2.300x2.300	2.300x2.300	2.620x2.620	2.600×2.600
Tie bar diameter	mm	450	450	530	550
Movable platen stroke	mm	2.300	2.300	2.600	2.600
Ejection stroke	mm	400	400	400	400
Injection stroke	mm	1.800	1.800	2.200	2.200
Max. injection velocity (without alloy)	m/s	10	10	10	10
Min. sleeve diameter	mm	150	150	240	240
Max. sleeve diameter	mm	230	250	330	330
Max. shot weight (Al alloy) with 65% min. sleeve filling up and 95% of injection stroke	kg	51,07	51,07	159,79	159,79
Max. shot weight (Al alloy) with 65% max. sleeve filling up and 95% of injection stroke	kg	120,07	141,86	302,10	302,10
Max. projected area with min. sleeve diameter	cm <sup>2</sup>	3.164	3.451	9.359	10.522
Max. projected area with max. sleeve diameter	cm <sup>2</sup>	7.439	9.587	17.695	19.893
Max. projected area with nominal clamping force and p=400 bar on alloy	cm <sup>2</sup>	14.016	15.291	20.515	23.063
Pressure on the alloy in the min. sleeve	bar	1.772	1.772	877	877
Pressure on the alloy in the max. sleeve	bar	754	638	464	464
Injection positions	mm	0; -650	0; -650	0; -1.000	0; -1.000
Max. plunger penetration	mm	700	900	1.280	1.280
Sleeve centering diameter	mm	370	370	480	480
Working pressure	bar	180	180	180	180
Dry Ciclyng (DIN 24480)	n/1'	1,3	1,3	1,1	1,1
Pump motor power	kW	4x75	4x75	4x110	4×110
Injection motor power	kW	55	55	75	75
Machine weight	Ton	430	430	732	732
Machine dimensions (LxWxH)	m	20,4x7,4x6,3	20,4x7,4x6,3	26x8,4x7,7	26,5x8,4x7,7

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# The **FUTURE** of die casting is **HERE**

IDRF

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Same passion, after more than 75 years of history

# The GREATEST PRESS ever manufactured

**GIGAPRESS** introduces a new dimension in high end die casting technology.



"Giga Press is a thing that hopefully changes the world of automotive and it will definitely change the world of die casting machines forever'

Riccardo Ferrario

**"WE WANT TO MAKE** the largest single piece castings in the world"

Riccardo Ferrario had this clear goal in mind, when he first thought about **GIGAPRESS**, a visionary project to overcome the limits of traditional die casting press market.

The 'mission impossible' took 4 years of R&D, a talented team of excellent professionals in different fields, a total commitment and a strong perseverance to succeeding.

And now the future od die casting is here.

With many machines in full effect all over the world and many orders received by Idra Group, **GIGAPRESS** is already a huge success, a revolution that is changing the world of automotive and die casting machines forever.

**GIGAPRESS** going from 5500 to 9000 tons and counting opens a new era in die-casting 'giga' solutions.



GIGAPRESS is a revolutionary die casting machine for the automotive industry, offering the perfect solution for the production of single piece chassis for Hybrid – full electric vehicles, not plagued by defects inherent with welding and bolting parts together.

Equipped with the brand new 5S Injection System, **GIGAPRESS** provides more stable injection conditions in all phases, with the best possible dynamic force in every possible operating phase and therefore the possibility of manufacturing larger structural castings with thinner walls: the single piece chassis weigh less despite being structurally superior.

GREAT in sustainability, in reliability. in innovation. in style.

A result of three years of R&D by Idra's 'Dream Team' of experts, GIGAPRESS is a huge stepforward for the industry, offering best-in-class injection performance, a high dynamic force with strong intensification for final pressure and a complete setting flexibility with precise, and stable production parameters.

**GIGAPRESS** is great in sustainability, with 50% energy savings compared to Idra's existing OLCS product line, great in reliability, with easy maintenance and long lasting components, great in innovation, with a new and amazing Injection System, and great in style, with its good looking Italian design guarding system.

## **GIGAPRESS**

offers unparalleled guaranteed long life and reliability.

### Fastest cycle times

• Integrated high flow hydraulic manifold blocks Increased pump capacity utilizing

DCP technology

### Low Energy cost

- Energy efficient motors with speed control
- Minimize injection pressure loss and accumulator recharge time

### Easy maintenance and minimal risk of fluid loss

- All-in-one hydraulic manifolds
- Limited use of external pipe-work
- Designed-for-access mechanical groups with new guard design



### User friendly controls

- Inject Computer 3.2 (best in class machine management software)
- Eliminate push button Unit using Multiple touch screens. • Cell controller Single point setting for integrated peripheral automation.

### Fit for complex parts manufacture

- Closed loop 5S regenerative control of the injection velocity.
- Programming and control of process parameters



### New injection series 5S<sup>®</sup>

- Closed loop regenerative injection with aux servo pump for efficient recharge
- Extended velocity control valve life by balance of hydraulic forces
- High dynamic force necessary to fill difficult castings
- Maintaining same final pressure requirement for porosity in power train castings

### New Guarding System

- Good looking Italian style
- Reducing complex electrical parts and stops
- Simplified assembly of the system with modular scalable construction
- Increased safety requirements for access while machine is running
- Reduced emissions from the die casting process

### DCP Hydraulic System

- Reduced energy consumption per cycle of the DCM cell
- Separated closing and injection pump systems
- Allowing subgroup testing for the injection system

### Cell Controller Integration

- A more efficient way of managing the software requirements for complicated cells.
- Standard DCM software avoids instability and unnecessary stops
- Flexibility and customization for many different configurations
- Easy integration with the best in market products