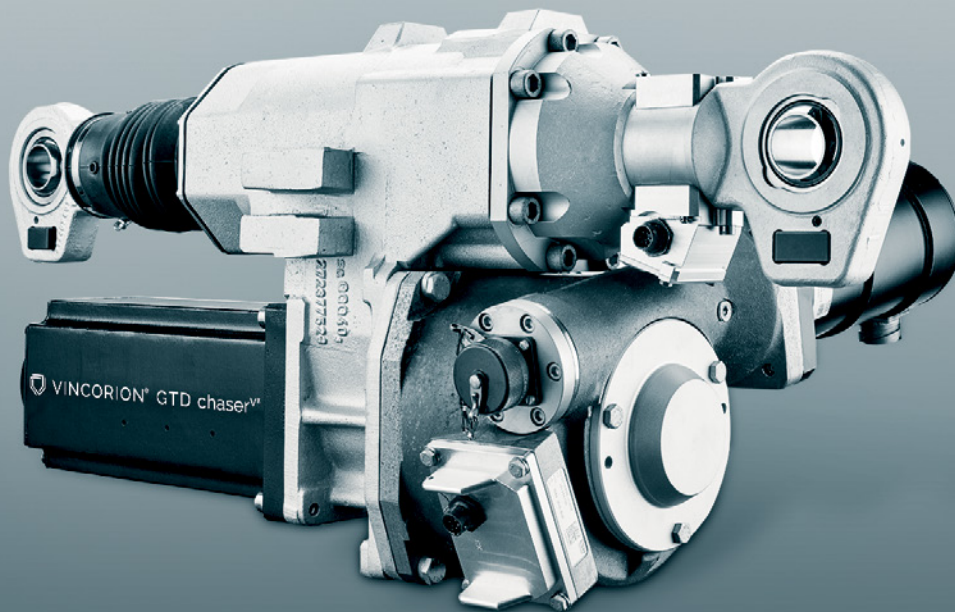




VINCORION®



SOLUTIONS. TAILORED.



DEFENSE

VINCORION GTD CHASER[®]. EXACT AND QUICK WEAPON STABILIZATION.

A wide range of applications: The GTD chaser[®] product family.

There is nothing more critical than for modern combat vehicles to be able to react quickly to surrounding conditions. So, the quickest target sighting, acquisition, tracing, and proper positioning of the main armament is vital for the foremost goal: a first-round hit. To achieve this, the sights, targeting devices, and weapon systems must be decoupled from the vehicle movements. In other words, they must be perfectly stabilized. That's where our GTD chaser[®] come in:

VINCORION delivers essential systems to battle tanks and fighting vehicles that are deployed in armed forces all over the world. These include the GTD chaser[®] turret and weapon controls for extra-large, large, medium and remotely operated weapon systems, which – founded on the most modern control technology and digitally configurable systems – form the basis for a highly precise aiming and stabilization system, allowing alignment movements to be automatically stabilized or manually controlled for absolute precision.

The GTD chaser^v product family of electrical systems for aiming, stabilization, and slaving of armaments has a wide range of applications for reconnaissance and combat in light and heavy fighting vehicles. It covers a variety of drive systems – from spindle to spur gear – to meet the different mechanical interfaces. Its high reliability together with optimized life-cycle costs gives it the leading edge our customers truly value. Extreme accuracy is achieved through our wide portfolio of weapon and turret gyros as well as acceleration sensors. Furthermore, we offer a variety of back-up drive handles and gunner handles for a perfectly optimized man-machine interface.

GTD CHASER^v ELECTRIC DRIVES

- The elevation drive aligns the weapon in the vertical direction
- The azimuth drive aligns the turret in the horizontal direction
- According to the signal of the stabilization and power electronics
- Optimized for use in military stabilization systems
- The systems can be fitted with a redundant emergency drive, consisting of a mechanical manual drive or an electric drive

STABILIZATION AND POWER ELECTRONICS:

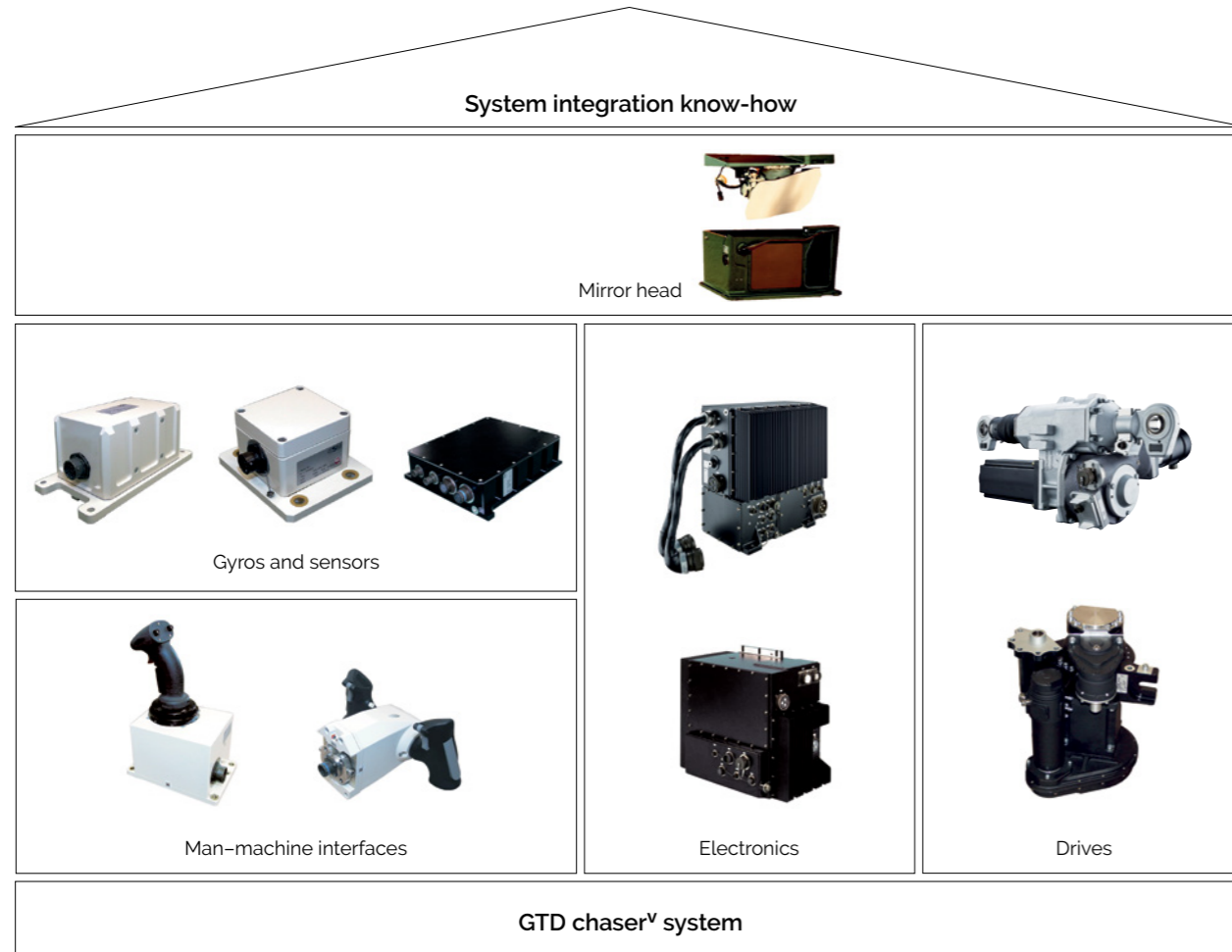
- Transforms the power supply from the carrier vehicle into two 3-phase systems
- Supplies and controls the servo motors for alignment and stabilization
- Digital version with CAN bus interface available

FIELDS OF COMPETENCES:

- New development of gun turret drive weapon system
- System integration know-how for midlife extension programs
- Competency to work with high imbalances and develop precise solutions suitable for individual requirements

THE BENEFITS SPEAK FOR THEMSELVES:

- **Low life-cycle costs:** Reduced total cost of ownership thanks to extreme reliability and practically maintenance-free solutions
- **Precise and fast response regardless of landscape:** Resistant to all types of shock and vibration
- **Excellent level of efficiency with low power consumption:** Brushless synchronous motor with absolute encoder
- **Fast-track prototype solutions**
- **Total compatibility:** Zero backlash between output pinion and weapon
- **Ready to use:** No settings or adjustments necessary
- **Customized:** All components and systems precisely meet your individual requirements



Technical Specifications

Competence	GTD chaser ^v system integrator for new development and midlife extension programs					
System supply voltage	18V DC – 32V DC and 600V DC – 800V DC					
System weight	approx. 190 kg – 494 kg					
System type	Pinion, spindle, toothed rack					
Examples of system drives	GTD chaser ^v for medium weapons		GTD chaser ^v for large weapons		GTD chaser ^v for extra-large weapons	
	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth
Dimensions (W × D × H)	459 mm × 534 mm × 373 mm	392 mm × 323 mm × 451 mm	790–996 mm × 534 mm × 368 mm	605 mm × 415 mm × 802 mm	827 mm × 782 mm × 502 mm	534 mm × 694 mm × 716 mm
Performance						
Max. revolutions	275 rpm	100 rpm	205 mm (stroke)	115 rpm	21.2 rpm	42.2 rpm
Max. torque	3.350 Nm	550 NM	32.000 N (max. force)	1.100 Nm	4.250 Nm	2.100 Nm
Mission speed						
Max. speed	> = 45°/s	> = 45°/s	> = 40°/s	> = 40°/s	11.25°/s	11.25°/s
Max. aiming speed	20°/s	40°/s	> = g°/s	> = 30°/s		
Min. aiming speed	<- 0.3 mrad/s	<- 0.3 mrad/s	<- 0.3 mrad/s	<- 0.3 mrad/s	<- 0.2 mrad/s	<- 0.2 mrad/s
Stabilization Accuracy, typical	< 0.3 mrad					
Operating Conditions – Ambient Temperature	According to STANAG 2985 (cycle A2, B1, C2)					
Platform class references	Puma, Centauro		Leopard 2, Kürassier, Future Combat Systems		Tank Howitzer 2000	



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