elann

PLANETARY GEARBOXES

CPTorque Pro
PLANETARY GEARBOX SERIES

CPTorque Pro Large
PLANETARY GEARBOX SERIES

elann

PRECISION
PEOPLE
PROCESS
PERFORMANCE

ABOUT US

Elann Drive & Automation is an Indian deep-technology company developing advanced industrial drivetrain solutions. With over 12 years of experience, a team of 60+ people and 58,000 sq. ft. of working space, we engineer high-torque planetary gearboxes, IE5 PMSM motors and intelligent drive-control systems. By combining mechanical engineering, electromagnetics, precision manufacturing and software, Elann creates compact, efficient and application-specific solutions for demanding industries. Our purpose is to develop the latest drivetrain innovations within India and build indigenous technology for the future of intelligent industrial motion.

12+
YEARS OF EXPERIENCE

60+
PEOPLE

58,000+
SQ. FT. OF WORKING SPACE

INDIGENOUS INNOVATION

APPLICATION-SPECIFIC SOLUTIONS

ENGINEERING EXCELLENCE

TRUSTED FOR A STRONGER TOMORROW

BUILT IN INDIA
FOR A STRONGER TOMORROW

MADE-IN-INDIA

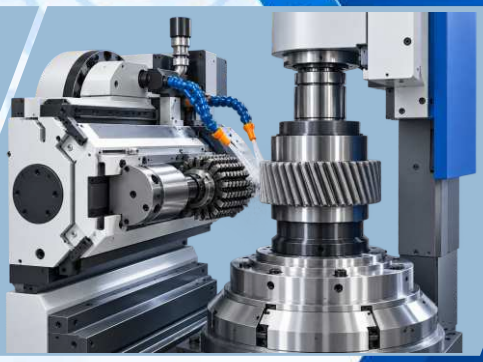
elann

PRECISION
PEOPLE
PROCESS
PERFORMANCE

ADVANCED MANUFACTURING & QUALITY

Precision Processes. Reliable Gearboxes.

At Elann, advanced manufacturing and stringent quality assurance work together to deliver precision, consistency and reliable performance in every gearbox we manufacture.



CONTROLLED MANUFACTURING FOR CONSISTENT QUALITY

- ACCURACY AT EVERY STAGE
- RELIABILITY IN EVERY GEARBOX
- BUILT FOR A STRONGER TOMORROW

OUR MANUFACTURING & QUALITY PROCESS

QUALITY MATERIALS → PRECISION MANUFACTURING → DIMENSIONAL INSPECTION → ASSEMBLY → FINAL QUALITY CHECK

ENGINEERING TODAY
FOR A BETTER TOMORROW

elann

CPTorque Pro

PLANETARY GEARBOX SERIES

12
SIZES

900 – 47,000
Nm
TORQUE RANGE

A COMPACT AND HIGH-PERFORMANCE PLANETARY GEARBOX SERIES DESIGNED FOR A WIDE RANGE OF INDUSTRIAL APPLICATIONS. ENGINEERED FOR RELIABILITY, HIGH TORQUE DENSITY AND LONG SERVICE LIFE.

CPTorque Pro Large

PLANETARY GEARBOX SERIES

10
SIZES

34,000 – 675,000
Nm
TORQUE RANGE

BUILT FOR HEAVY-DUTY APPLICATIONS, THIS SERIES DELIVERS EXTREMELY HIGH TORQUE, RUGGED CONSTRUCTION AND SUPERIOR RELIABILITY FOR DEMANDING INDUSTRIES.

Custom Build

GEARBOXES

IN ADDITION TO OUR STANDARD RANGE, WE ALSO OFFER CUSTOM BUILD GEARBOXES TAILORED TO YOUR SPECIFIC APPLICATION REQUIREMENTS.

AND MANY MORE

CPT Technology

elann

COMPACT. STRONG. MORE RELIABLE

Advanced CPT (Cantilever Planetary Transmission) technology for higher torque transmission in a compact footprint. The unique design ensures improved load distribution, superior durability and long service life in heavy-duty applications.

Integrated Cantilever Planet Pin

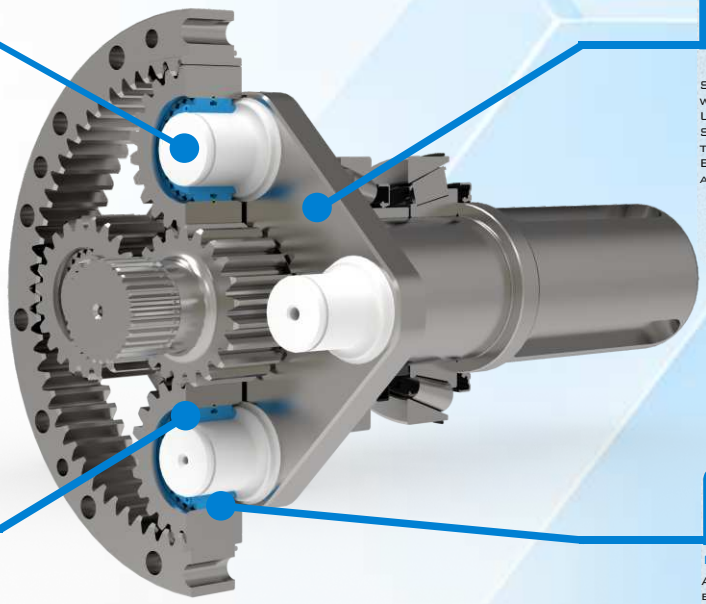
INTEGRATED STRENGTH

PIN FORMS PART OF THE CARRIER NO SEPARATE RIGID PIN.
SELF-FLEXING UNDER LOAD FOR DYNAMIC STABILITY.
REDUCES STRESS POINTS AND INCREASES BEARING LIFE.
COMPACT AND RIGID DESIGN FOR HIGHER TORQUE OUTPUT.

Monolithic Forged Cantilever Planet Carrier

STRENGTH FORGED IN ONE PIECE

SINGLE-PIECE FORGED DESIGN ELIMINATES WEAK POINTS OF CAST CARRIERS.
UP TO 300% HIGHER TENSILE STRENGTH.
SUPERIOR LOAD DISTRIBUTION & TORSIONAL STIFFNESS.
ENGINEERED FOR EXTREME TORQUE APPLICATIONS.



Self-Aligned Flexible Bearing System

SMARTER ALIGNMENT, LONGER LIFE

REPLACES CONVENTIONAL NEEDLE BEARINGS & WASHERS.
AUTOMATICALLY ALIGNS UNDER SHOCK LOAD SELF-LOCKING FOR EASY ASSEMBLY AND SERVICE.
COMPACT DESIGN ALLOWS THICKER, STRONGER PLANET GEARS.

Self-Locking Mechanism Planet Gear

PRECISION LOCKED, TORQUE SECURED

A UNIQUE SELF-LOCK MECHANISM ENSURES THE FLEXIBLE BEARING IS SECURELY LOCKED WITHIN THE PLANET GEAR. SIMPLIFIES ASSEMBLY—NO ADDITIONAL LOCKING ELEMENTS REQUIRED.
INCREASES RELIABILITY AND POSITIONAL ACCURACY OF THE PLANETS.

HIGHER Number of Planets

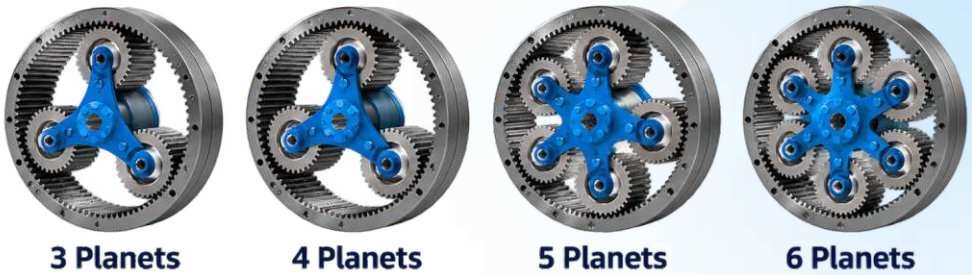
Up to 90% Higher Torque in the Same Gearbox Size

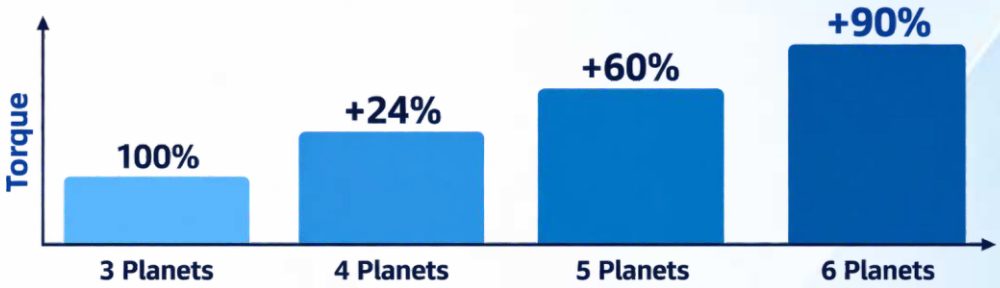
More Planets. More Contact. More Power.

Why More Planets Matter?

Advanced material technology and optimized gear profiles enable more planet gears to share the load efficiently. Elann's CPT Series accommodates up to 6 planets, delivering higher torque capacity, improved load distribution and enhanced durability in the same gearbox size.

Torque distribution in 3–6 Planets





Optimized Torque Sharing

Specially engineered planet gear profile ensures equal load distribution across all planets.

Higher Number of Planets

Every additional planet increases torque capacity as the load is divided equally among more gears.

Integrated with CPT Carrier

Supports up to 6 planets without bending, misalignment, or stress concentration.

Elann Multi-Planet Design

Supports up to 6 planets
Equal torque distribution
Higher torque density without size increase
Better shock load absorption
Lower tooth stress and longer life

elann

PLANETARY GEARBOX

CORE-STRENGTH

BUILT FOR HIGH TORQUE APPLICATIONS

Heavy-Duty Bearing Architecture

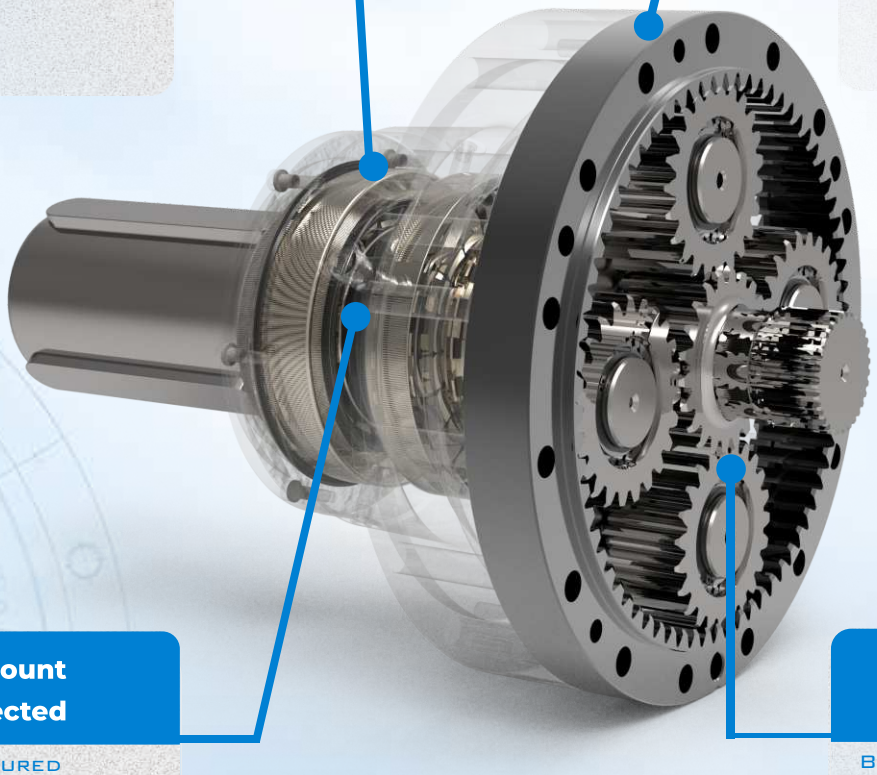
Engineered for Extreme Loads

Built for high torque transmission and continuous overload capability.
Superior resistance to shock loads
Enhanced axial and radial load capacity, ideal heavy applications.
Ensures longer service life, reduced downtime, and reliable performance under full-load cycles.

High-Strength Ring Gear

The Backbone of Durability

Made from 42CrMo4 / 39CrMoV9 alloy steels.
Gas nitrided & press quenched for surface hardness.
Maintains dimensional accuracy under cyclic torque.
Ensures long operational life under continuous duty.



Vertical Mount Seal-Protected

Lubrication Secured

The top bearing sits between two seals, eliminating dry bearing issue.
The cavity between seals is filled with high-performance grease, guaranteeing continuous lubrication.Prevents dry-running conditions, ensuring extended bearing life and higher operational reliability

Optimized Gear Profile

Built for Maximum Torque

Optimized gear tooth geometry for superior load sharing.
High-grade alloy steel with specialized heat treatment.
High surface hardness, strong core toughness.
Enables smooth torque flow and reduced vibration.

HIGH TORQUE CAPACITY

LONG SERVICE LIFE

ROBUST DESIGN

HIGH RELIABILITY

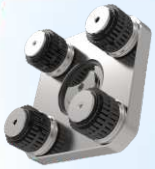
CONTINUOUS PERFORMANCE

elann

CPTorque Pro

AND **LARGE** SERIES

FEATURES

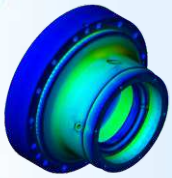


Unibody Forged Carrier

High-strength unibody forged planet carrier construction
Increased rigidity for handling heavy shock and impact loads
Improved operational reliability in demanding industrial environments

Multi-Planent Sharing

A higher number of planets per stage ensures superior torque transmission and optimized load sharing across all planets. This design reduces gear stress, vibration, and wear while providing smoother operation and high gearbox life.



Optimized Housing

The rigid housing design ensures superior structural strength, alignment accuracy, and thermal stability. Precision-machined construction and enhanced heat dissipation contribute to smooth and efficient operation.

CPT Technology

Advanced CPT for higher torque transmission in a compact footprint. Cantilever pin carrier design improves load distribution, superior durability, reliability, structural rigidity and long service life in heavy-duty applications

Modular Design

The modular gearbox design offers various output and input configurations with high inter-changeability between components. Flexible mounting options such as flange, foot, and shaft arrangements can be easily adapted to suit different applications. Multiple motor adaptors, input stages, and accessory options provide easy integration across a wide range of industrial systems.

Compact Size

Advanced CPT technology combined with a higher number of planets per stage enables maximum torque transmission within a compact gearbox size. The optimized planetary arrangement delivers high power density, reduced Installation space, and superior performance for heavy-duty industrial applications.

Low Carbon Footprint

Lightweight and optimized gearbox design reduces material consumption and overall energy usage. High efficiency and compact construction help minimize carbon emissions while supporting sustainable industrial operations. Designed for lower environmental impact, contributes toward energy-efficient and eco-friendly performance.

Built for Every Industry

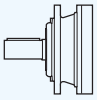
The CPTorque Pro series is suitable for steel, cement, mining, paper, sugar, rubber, plastic, marine, and material handling industries.
It is engineered for reliable performance in harsh environments with long operational life and dependable efficiency.

CONFIGURATION

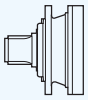
elann

GEARBOX INPUT AND OUTPUT OPTIONS

GEARBOX OUTPUT TYPES

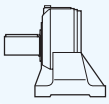


SCS Solid Shaft with Flange

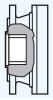


MS Male Splined with Flange

UO Universal Output



FM Solid Shaft with Unibody foot



FS Hollow Splined

HSD Hollow with Shrink Disc

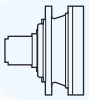
UO-F Universal Output with Flange

UO-FM Universal Output with Foot

HWK Hollow with Keyway

HCS Heavy Support Solid Shaft

HDF Driving Flange



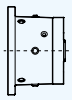
HX Solid Hex Shaft

GEARBOX INPUT TYPES

ST Standard Input Available in hollow splined DIN5482 Standard

HST Heavy Standard Input Available from EL145 Input Stage

MA* ** Hollow Adaptor for IEC Electric Motor. Frame size of motor to add in MA i.e. MA160



HMA Hollow Adaptor for Hydraulic Motor. For adaptor code, please contact Elann

SI* ** Solid Shaft Input.

SIZE	SI28	SI40	SI50	SI60	SI90	SI110
DIA	28mm	40mm	50mm	60mm	90mm	110mm

INPUT ADDITIONAL MOUNTING

HB Holdback device clockwise:HBCW
Counter-clock wise: HBCCW

PB Parking Brakes

*For further special outputs and inputs, please discuss with Elann representative

GEARBOX

elann

MOUNTING OPTIONS

Elann offers various mounting options – foot, flange and shaft mounted – suitable for every application. Our flexible mounting configurations ensure easy integration, space optimization and reliable operation across different industries.

FLEXIBLE MOUNTING FOR EVERY APPLICATION

FOOT MOUNTED GEARBOX

- Robust and stable mounting
- Easy installation and maintenance
- Suitable for heavy-duty applications
- Wide range of sizes and ratios

Foot Mounted

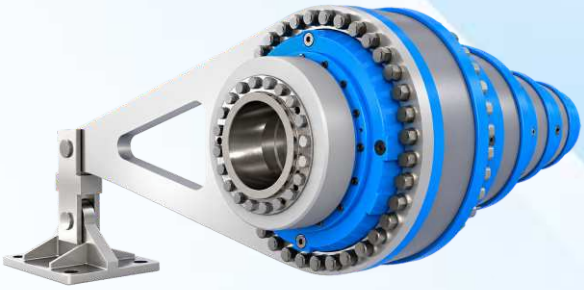
FLANGE MOUNTED GEARBOX

- Direct flange mounting to driven equipment
- Compact and space-saving design
- High alignment accuracy
- Ideal for applications with limited space

Flange Mounted

SHAFT MOUNTED GEARBOX

- Hollow shaft design for direct mounting
- Compact and economical solution
- Reduces overall system size
- Almost No Foundation Civil Work



Shaft Mounted

Versatile Configurations
Suitable for diverse industrial applications.

Easy Integration
Simple installation and maintenance.

Reliable Performance
Engineered for long service life.

Custom Solutions
Application-specific mounting options available.

elann

INDUSTRIES
WE SERVE

Built For Diverse Industries

Planetary Gearboxes Engineered for Demanding Applications
From heavy-duty processing to precision-driven applications, Elann planetary gearboxes are engineered to deliver high torque, reliable performance and long service life across a wide range of industrial environments.

SUGAR MILL

STEEL MILL

CONSTRUCTION

PAPER MILL

CEMENT INDUSTRY

MINING

RUBBER INDUSTRY

PLASTIC INDUSTRY

PHARMA INDUSTRY

FOOD & BEVERAGE

RECYCLING

WATER TREATMENT

OFF-HIGHWAY

CRANES & LIFTING

CONVEYOR SYSTEMS

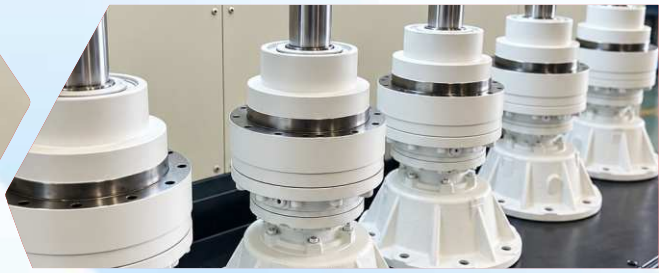
elann

Planetary Gearboxes
Custom Solutions
Industrial Applications

Precision Gearboxes. Proven Engineering.

PHOTO GALLERY

A glimpse into Elann Drive & Automation's industrial gearbox solutions — from precision manufacturing and assembly to finished gearboxes ready for demanding applications.



elann

Engineering Motion for a Stronger Tomorrow

Planetary Gearboxes
Custom Solutions
Industrial Applications

LET'S DRIVE THE FUTURE TOGETHER

Elann Drive delivers advanced planetary gearbox solutions for demanding industrial applications. From standard configurations to application-specific designs, our engineering team works with you to develop the right drive solution for your requirements.

CONNECT WITH US

ELANN DRIVE
AND AUTOMATION PVT LTD

Unit-1 Kasna Industrial Area, Site V Greater Noida, 201310 India

Unit-2 Plot#65 Ecotech-11 Greater Noida, 201310 India

+91-8826656965 +91-8882949992

nitinthapar@elann.in parvesh@elann.in

www.elann.in

SCAN TO CONNECT

SCAN TO CONNECT

YOUR APPLICATION.
OUR PLANETARY EXPERTISE

Talk to us for your next gearbox requirement