UNI CIRCLE FASTENERS SDN BHD

FASTEN WITH **CONFIDENCE**

Founded in 2003, Uni Circle Fasteners Sdn Bhd specializes in **high-performance, custom-made, and special-alloy fasteners.**

ABOUT US

Uni Circle Fasteners Sdn Bhd (UCF) is a specialist in high-performance, custom-made and special-alloy fasteners, supporting technical and project-specific fastening requirements across Southeast Asia and Australia, including Malaysia, Singapore, Brunei, Indonesia, and Vietnam.

ESTABLISHED IN 2003,

UCF focuses on high-performance fasteners for critical industrial applications where material integrity, accuracy, and reliability are essential.

Backed by over 20 years of experience in fasteners and industrial supply, UCF delivers precision-engineered products, dependable supply chain solutions, and reliable customer support.

We specialize in custom-engineered fasteners built to exact project specifications, ensuring performance, compliance, and long-term reliability in demanding environments.

OUR VISION

To be a leading regional specialist in high-performance, custom-made, and special-alloy fasteners.

OUR MISSION

To provide reliable fastening solutions that ensure safety, performance, and long-term value.

CORE VALUES

U UNITY

We work collaboratively with our stakeholders to achieve shared success.

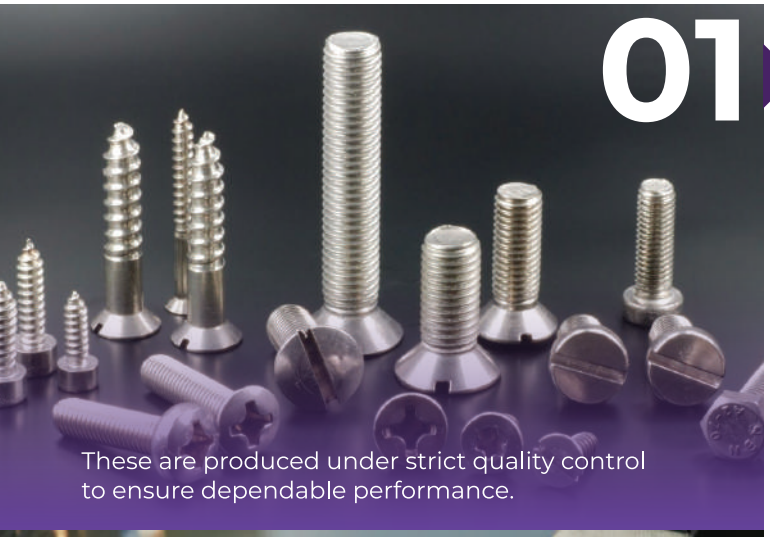
C CREDIBILITY

We uphold integrity, reliability, and technical accuracy in every solution we deliver.

F FUTURE-DRIVEN

We continuously improve our capabilities to meet evolving industry needs.

OUR SOLUTIONS



01

These are produced under strict quality control to ensure dependable performance.

STANDARD FASTENING SOLUTIONS

We offer an extensive range of standard fasteners, including:

- Bolts, Nuts, Screws, Washers
- Anchors, Rivets, Pins, Clips
- Socket Screws and Machine Screws
- High-Tensile, Stainless Steel, and Coated Fasteners

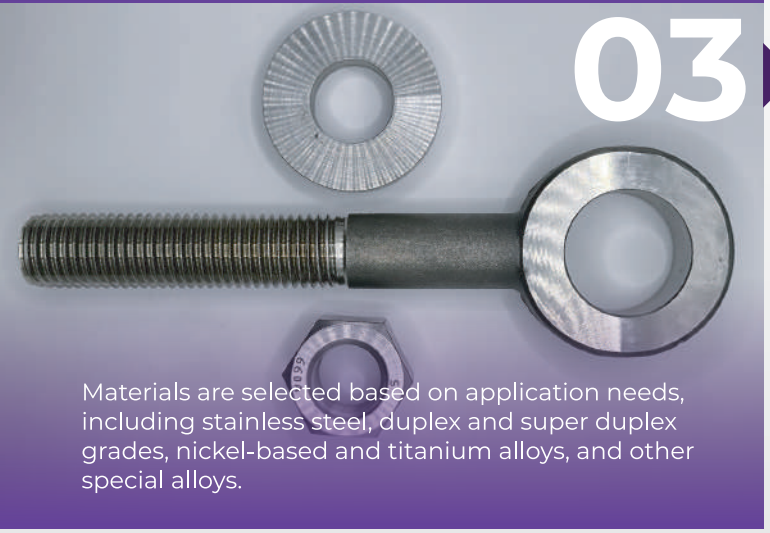
02

Suitable for OEMs, machinery manufacturers, specialized construction, and project-based industrial applications.

CUSTOM-MADE FASTENER SOLUTIONS

For projects requiring non-standard components, our custom fastener solutions support:

- Non-standard sizes and thread types
- Custom head designs and drive types
- Heavy-duty and high-strength fasteners
- Wide material selection
- Low-volume prototypes & large-volume production



03

Materials are selected based on application needs, including stainless steel, duplex and super duplex grades, nickel-based and titanium alloys, and other special alloys.

SPECIAL ALLOY FASTENER SOLUTIONS

We supply fasteners designed for demanding environments requiring:

- High-temperature resistance
- High tensile strength
- High corrosion and chemical resistance
- Long-term structural durability

OUR SOLUTIONS

Our logistics capability supports project continuity and minimizes downtime for industrial operations.

04 SUPPLY CHAIN & LOGISTICS CAPABILITY

UCF supports fast and reliable delivery of critical fasteners through:

- Nationwide delivery across Malaysia
- Regional shipping to Singapore, Indonesia, Brunei, Vietnam, Australia, and other markets
- Strong partnerships with established logistics providers
- Streamlined quotation, order processing, and fulfillment
- Well-organized warehousing for accurate picking and packing

Supporting fastener selection and application requirements for project-based industrial needs.

05 ENGINEERING SUPPORT & TECHNICAL GUIDANCE

We provide technical guidance related to fastener selection and usage, including:

- DIN and ISO standards guidance
- Thread type and compatibility checks
- Material selection guidance
- Guidance on suitable coatings and corrosion protection

Ensures a reliable, consistent fastener supply aligned with project needs.

06 QUALITY & COMPLIANCE SOLUTIONS

Our quality assurance approach includes:

- Dimensional and thread inspections
- Material grade verification
- Supplier and manufacturer evaluation
- Documentation support
- Traceability and batch control
- Compliance with applicable international fastener standards

OUR PRODUCT

SPECIAL ALLOY FASTENERS

Custom-engineered fasteners in exotic, high-performance alloys for extreme temperature, pressure, and corrosion environments.

HIGH-PERFORMANCE BOLTING ALLOYS

ASTM A453 Grade 660 (A/B/C/D)

(Also known as Alloy 660 / A-286 / UNS S66286)

A proven high-temperature bolting grade widely specified for critical service applications.

KEY CHARACTERISTICS

- Excellent high-temperature strength
- Good creep resistance
- Suitable for demanding mechanical and thermal conditions

Nickel & Nickel-based Alloys

Inconel : **600 • 625 • 718 • 725 • X-750**
Incoloy : **800 • 800H • 800HT • 825 • 925**
Hastelloy : **C-22 • C-276 • C-2000**
Nimonic : **75 • 80A**
Monel : **400 • K-500**

KEY PROPERTIES:

- Outstanding high-temperature and oxidation resistance
- Excellent corrosion resistance in seawater and aggressive chemicals
- Suitable for sour service applications (NACE MR0175, material dependent)

Duplex & Super Duplex Stainless Steels

UNS S31803 / S32205 (DUPLEX 2205)	UNS S32550 (FERRALIUM 255)
UNS S32750 (SUPER DUPLEX 2507)	UNS S32760 (ZERON 100)

KEY PROPERTIES:

- High mechanical strength
- Excellent resistance to pitting and crevice corrosion
- Strong performance in chloride-rich environments

Austenitic & Heat-resistant Stainless Steels

316 / 316L / 316TI	317 / 317L	310 / 310S
321 / 347	904L	254 SMO® / AL-6XN®

KEY PROPERTIES:

- Excellent corrosion resistance in chemical environments
- Reliable performance at elevated temperatures

Martensitic & Precipitation-Hardening Stainless Steels

410 / 420 / 431	17-4PH (630)
15-5PH	A-286 / ALLOY 660

KEY PROPERTIES:

- High strength and hardness (heat-treatable grades)
- Good wear and fatigue resistance
- Stable mechanical performance under load
- Suitable for demanding structural and mechanical applications

Titanium Alloys

Titanium : **Grade 2**
Grade 5 (Ti-6Al-4V)

KEY PROPERTIES:

- Exceptional strength-to-weight ratio
- Outstanding corrosion resistance
- Weight-critical industrial applications

STANDARDS NOTE

Where specified, fasteners can be supplied in accordance with **ASTM F468**, **ASTM A1082**, and **ASTM F593** for applicable stainless steel and special alloy materials.

In addition to the material grades listed, a wider range of special alloys and international equivalent materials can be supported based on project requirements.

OUR PRODUCT

STUD BOLTS & INDUSTRIAL BOLTING SOLUTIONS

High-performance stud bolts, nuts, and bolting assemblies for high-temperature, high-pressure, and critical-service environments.

Stud Bolt – ASTM A193 / A320 Grades

Available in cut-length or full assembly sets.

Matching Bolting Assemblies (Nut-to-Bolt Compatibility)

Stud Bolt Grade	Recommended Nut Grade	Service Environment
B7	A194 Grade 2H	High-Temp / Standard Pressure
B7M	A194 Grade 2HM	High-Temp / Sour Service (H_2S)
B16	A194 Grade 4 or Grade 7	Extreme High-Temperature
L7	A194 Grade 4 or Grade 7	Low-Temperature / Cryogenic
L7M	A194 Grade 7M	Low-Temperature / Sour Service
L43	A194 Grade 7	Heavy Section Low-Temperature
B8 / B8M	A194 Grade 8 / 8M	Stainless Steel Service

TECHNICAL NOTES

- While Grade 2H is limited to high temperatures, Grade 4 and Grade 7 possess the metallurgical properties to handle both High-Temperature and Low-Temperature extremes without losing structural integrity.
- The "M" Designation (Sour Service): Grades ending in "M" (e.g., B7M, L7M, 2HM) are specifically heat-treated to a lower hardness. This is mandatory for compliance with NACE MR0175/ISO 15156 to prevent Sulfide Stress Cracking in sour gas environments.
- Stainless Steel Classes: Class 1 stainless steel is annealed (softer), while Class 2 is strain-hardened for significantly higher tensile strength. Ensure the class is specified based on the pressure rating of your application.

Heavy Hex Nut – ASTM/ASME A194 Grades

Matching nuts with full material traceability.

- **2H / 2HM** — High-Temperature / High-Pressure Service
- **4** — High & Low Temperature / High-Pressure Service
- **7 / 7M** — High & Low Temperature / High-Pressure Service
- **8 / 8M** — Stainless Steel

Corrosion Protection & Coating Options

- Xylan 1070 (FCC / PTFE)
- Xylan 1424 (FCC / PTFE)
- Xylar 2 (Cermet)
- Zinc Flake (Xylan Zinc Rich)
- Zinc-Nickel Electroplating (ASTM B841)
- Zinc Plating (ASTM B633)
- Hot-Dip Galvanizing (ASTM A153)
- Mechanical Galvanizing (ASTM B695)

Standards & Specifications (ASTM vs. ASME)

In the oil and gas industry, material specifications are often dual-certified.

- **ASTM**
  (American Society for Testing and Materials)
  The standard for testing and material properties (e.g., ASTM A193 / ASTM A320 / ASTM A194).
- **ASME**
  (American Society of Mechanical Engineers)
  The standard for construction and design. When a material is approved for the ASME Boiler and Pressure Vessel Code, an "S" is added to the prefix (e.g., SA-193 / SA-320 / SA-194).
- **SA / ASTM**
  Our products are typically supplied to meet both ASTM and ASME SA requirements to ensure compliance with global pressure vessel codes.

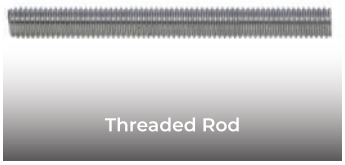
OUR PRODUCT

STRUCTURAL & FOUNDATION FASTENERS

Structural anchoring and load-bearing fasteners manufactured to drawings and specifications for use in concrete foundations, steel structures, and industrial building systems.

ROD-BASED STRUCTURAL FASTENERS

Tie Rod / Sag Rod



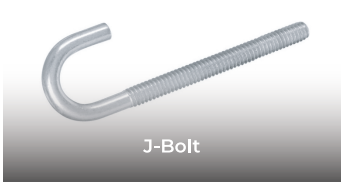
Threaded Rod

Double-End Stud

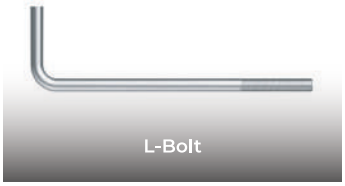
Square / ACME Threaded Rod

Used for structural bracing, load transfer, alignment, and reinforcement in steel frames, roofing systems, and industrial assemblies.

STRUCTURAL & ANCHORING FASTENERS



J-Bolt



L-Bolt

Foundation / Anchor Bolt

L-Shape Rebar

These fasteners are typically cast-in, embedded, or installed as part of structural connections to resist tensile, shear, and uplift forces.

MATERIALS AVAILABLE

- MILD STEEL
- CARBON STEEL (E.G. S45C)
- ALLOY STEEL (E.G. AISI 4140)
- STAINLESS STEEL (E.G. SS304 / SS316)

COATING & SURFACE TREATMENTS

- Zinc Plated (Blue / Yellow / Rainbow / Black)
- Hot-Dip Galvanised (HDG)
- Mechanical Galvanising
- PTFE / Xylan / FCC
- Plain / Self-Colour

OUR PRODUCT

CNC PRECISION MACHINED PARTS

High-precision components produced to specified tolerances based on technical drawings or 3D models.

CNC COMPONENT TYPES

TURNED COMPONENTS

- Bushings / Spacers / Sleeves
- Shafts & Pins
- Precision Threaded Parts

FASTENER-TYPE COMPONENTS

- Custom Nuts
- Custom Screws
- Special Bolt Heads
- Non-standard Threads

COMPLEX / CUSTOM SHAPES

- Multi-axis machined components
- Tight-tolerance parts
- Prototypes & low-volume engineering parts

MATERIALS AVAILABLE

- Mild Steel
- Carbon Steel
- Alloy Steel
- Stainless Steel
- Aluminium
- Brass
- Copper
- Bronze
- Titanium
- Engineering Plastics (Nylon, PTFE/Teflon)

STANDARD FASTENERS

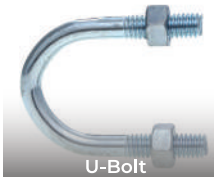
Industrial-grade fasteners for general engineering, manufacturing, construction, and MRO applications.

BOLTS

Hex Bolt

Carriage Bolt

Flange Bolt



U-Bolt

Eye Bolt

NUTS

Hex Nut

Nylon Lock Nut

Flange Nut

Cap Nut

Coupling / Long Nut

SCREWS

Machine Screw

Self-Tapping Screw

Self-Drilling Screw

Socket Cap Screw

Socket Button Head Cap Screw

PINS

Spring Pin

Dowel Pin

CLIPS

Circlip

E-Clip

WASHERS

Flat Washer

Spring Washer

F436 Washer

ANCHORS

Sleeve Anchor

Wedge Anchor

Drop-In Anchor

INDUSTRIES WE SERVE

We specialize in high-performance fasteners for critical applications across diverse industries:

OIL & GAS

LNG plants, pipelines, refineries, petrochemical facilities, and EPC contractors.

MARINE & OFFSHORE

Shipbuilding, offshore structures, subsea equipment, and seawater systems.

POWER GENERATION

Turbines, boilers, heat exchangers, and high-temperature applications.

CONSTRUCTION & INFRASTRUCTURE

Civil engineering, structural steelworks, foundation systems, and bridge projects.

MANUFACTURING & INDUSTRIAL PRODUCTION

OEM, machinery builders, valve & pump manufacturers, oil & gas equipment makers, and fabrication workshops.

MRO (MAINTENANCE, REPAIR & OVERHAUL)

Factory maintenance teams, repair contractors, and service workshops.

QUALITY ASSURANCE

UCF works with qualified manufacturers whose quality, safety, and environmental management systems comply with recognized international standards, including:

- ISO 9001 (Quality Management)
- ISO 14001 (Environmental Management)
- ISO 45001 (Occupational Health & Safety)
- ASTM (Material and Fastener Standards)
- ASME (Pressure Equipment Standards)
- API
- NACE (Sour Service Requirements)
- NORSOK
- PED (Pressure Equipment Directive)
- AD 2000
- CPR / 0343
- EIL

DOCUMENTATION & TESTING SUPPORT

Depending on project scope, material type, and customer requirements, supporting documentation may include:

- Supplier and manufacturer evaluation
- Material Test Certificates in accordance with BS EN 10204 (2.1, 2.2, 3.1), where available
- Raw material mill certificates
- Mechanical and material testing conducted by manufacturers or accredited external laboratories

This ensures quality and documentation are aligned with project specifications and agreed requirements.

Uni Circle Fasteners Sdn Bhd

No. 12 & 14, Jalan Utama 2/1, Taman Perindustrian Puchong Utama,
47100 Puchong, Selangor, Malaysia.

+603 8068 2026 +6011 1638 1101 +6011 2188 6011

sales@unicircle.com.my