



Brand-new SuperMetal products occurs when the innovation meets the right technique.

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LONG TIME AGO





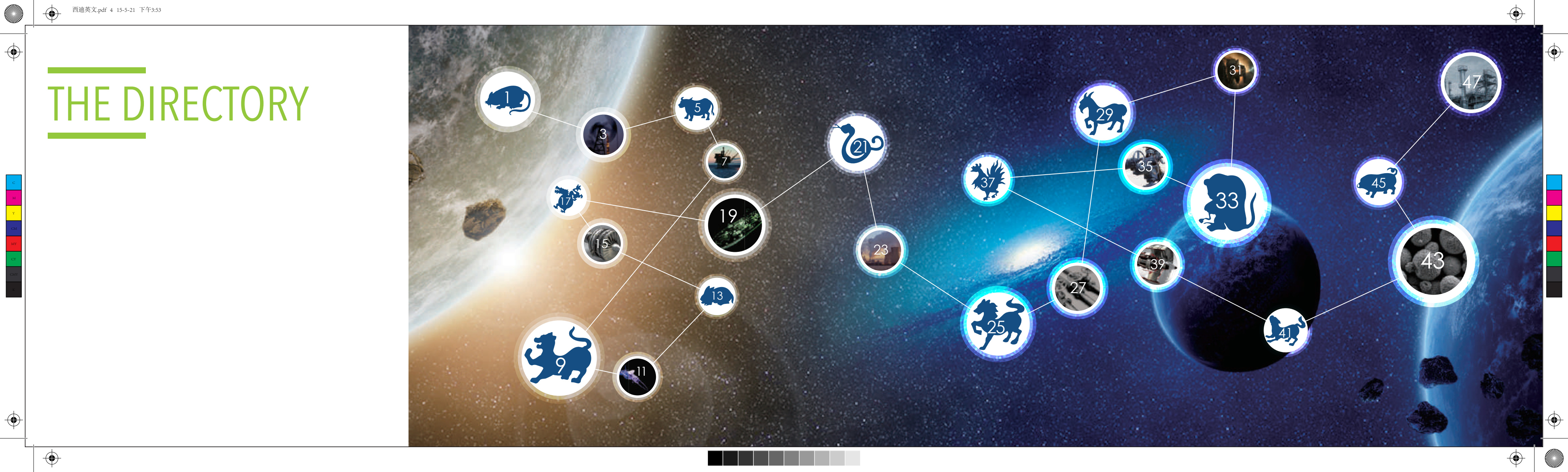


ASEEDER PLANET'S SECRET

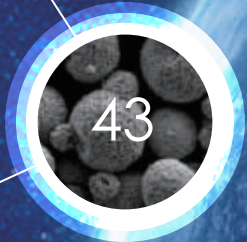
ASEEDER®

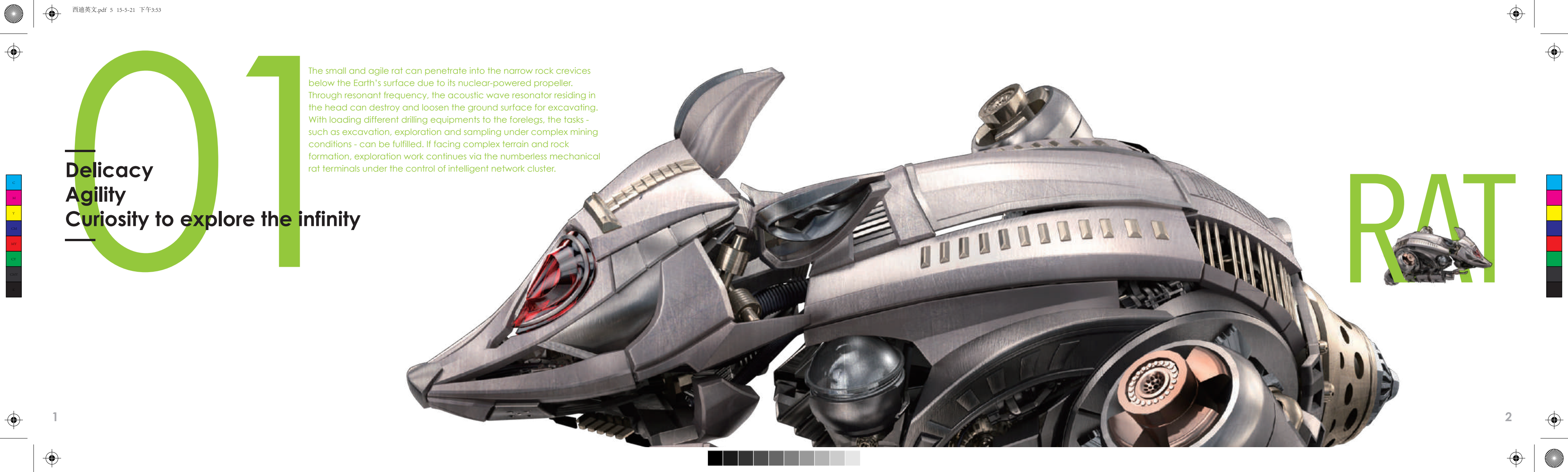
Long time ago, some mysterious force turned all 12 Chinese zodiac animals into 12 mechanical beasts boasting specific functions and superior performances on the planet of Aseeder in Galaxy.....





THE DIRECTORY





01

Delicacy
Agility
Curiosity to explore the infinity

The small and agile rat can penetrate into the narrow rock crevices below the Earth's surface due to its nuclear-powered propeller. Through resonant frequency, the acoustic wave resonator residing in the head can destroy and loosen the ground surface for excavating. With loading different drilling equipments to the forelegs, the tasks - such as excavation, exploration and sampling under complex mining conditions - can be fulfilled. If facing complex terrain and rock formation, exploration work continues via the numberless mechanical rat terminals under the control of intelligent network cluster.

RAT





3



01 Non-standard series



4



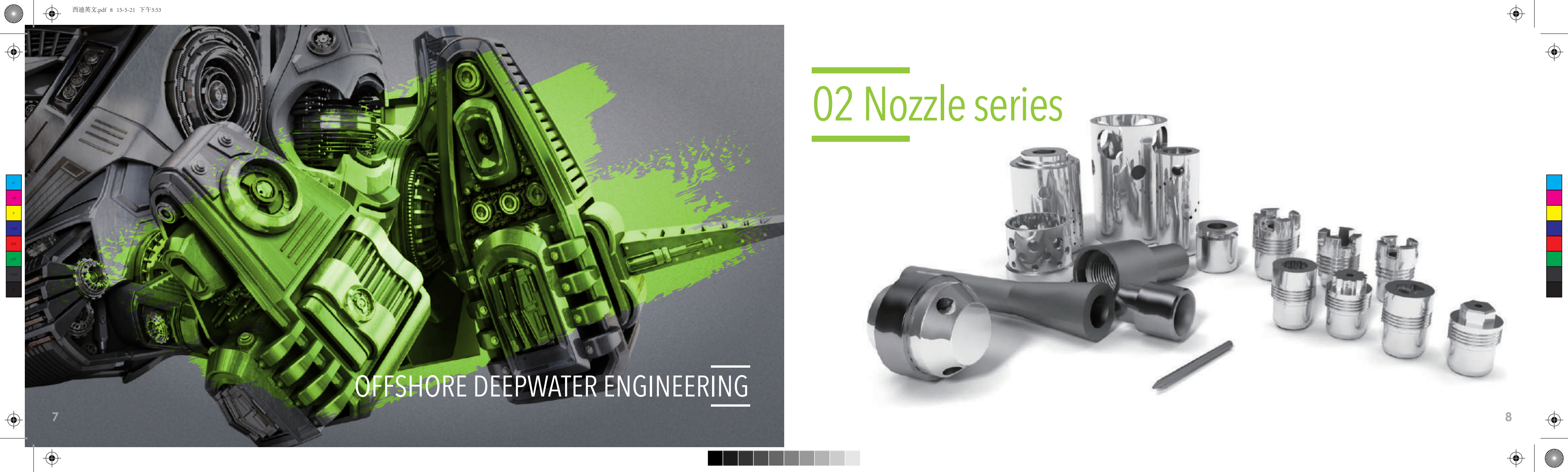


Ox

02

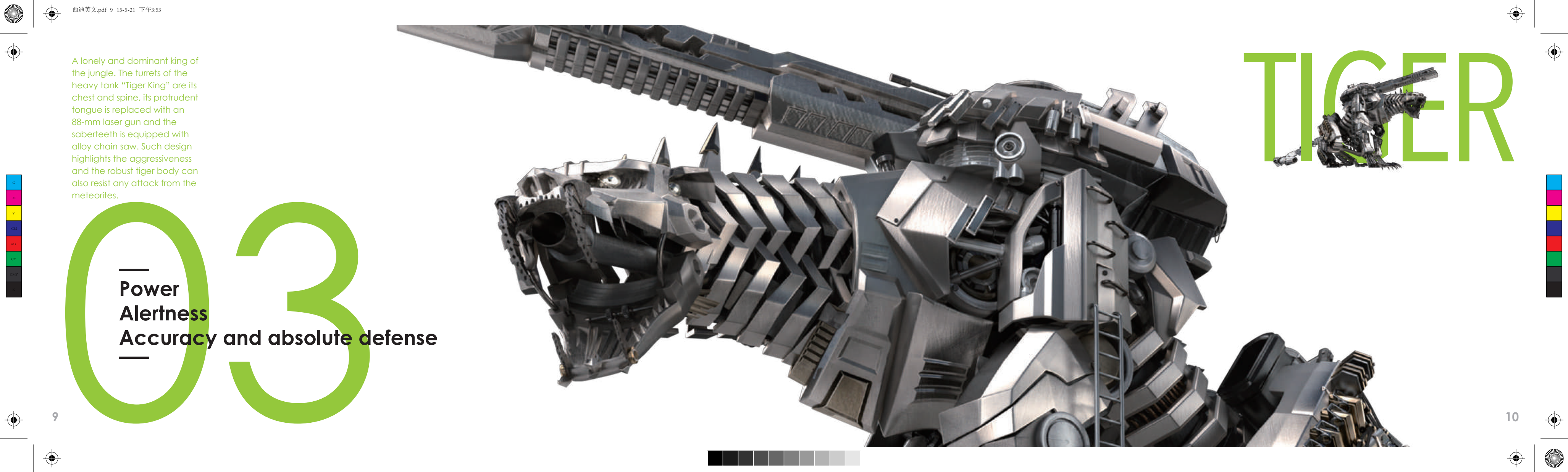
Stability
Giant
Comprehension and strength

The large-scale retractable counterweight platform on its back and the aircraft lift platform on its tail are suitable for maritime automatic adjustment. The combination of internal complicated mechanical structures and the high-hardness flexible materials adopted on colossal body surface makes it suitable for different environments, thus oil refining, chemical engineering, transportation and other functions are integrated together. Ox can be treated as a mobile base in the vast ocean, it revolves around the planet once a month to communicate and process signals from different regions.



02 Nozzle series

OFFSHORE DEEPWATER ENGINEERING



A lonely and dominant king of the jungle. The turrets of the heavy tank "Tiger King" are its chest and spine, its protrudent tongue is replaced with an 88-mm laser gun and the saberteeth is equipped with alloy chain saw. Such design highlights the aggressiveness and the robust tiger body can also resist any attack from the meteorites.

Power
Alertness
Accuracy and absolute defense

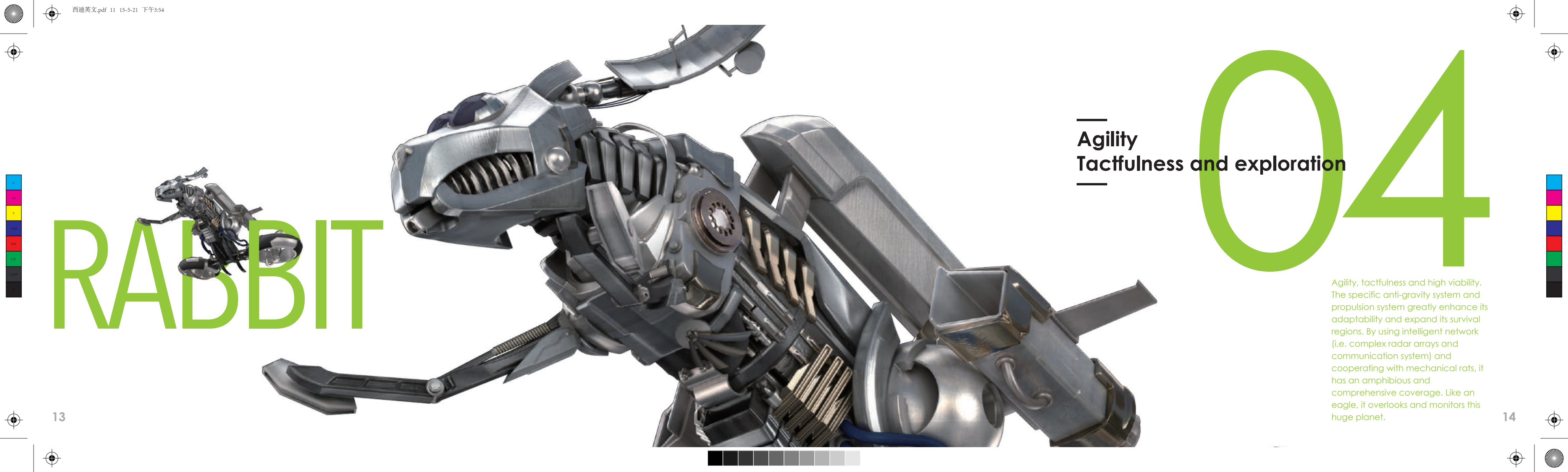
TIGER



MILITARY INDUSTRY

03 Valve stem head & valve seat series



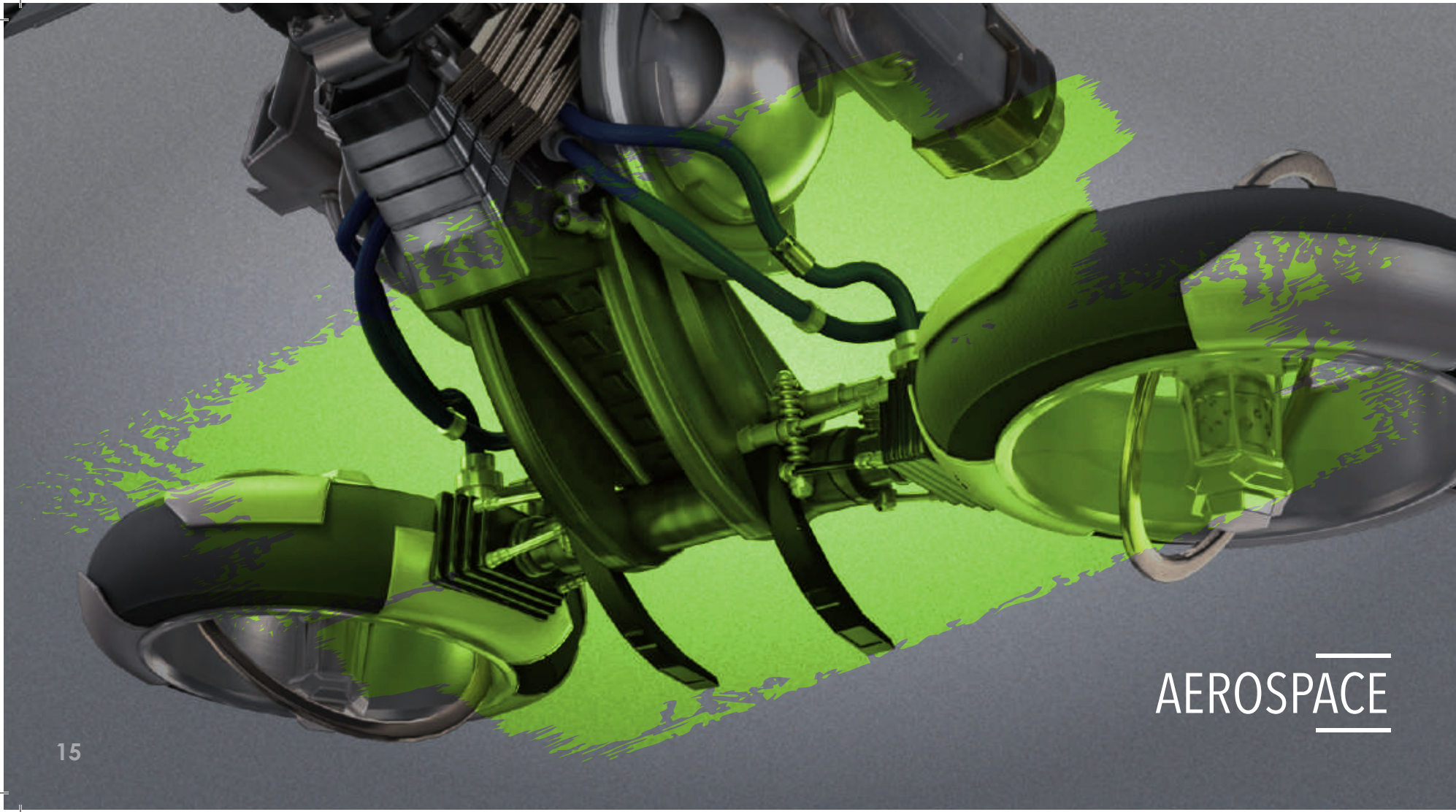


RABBIT

Agility
Tactfulness and exploration

04

Agility, tactfulness and high viability. The specific anti-gravity system and propulsion system greatly enhance its adaptability and expand its survival regions. By using intelligent network (i.e. complex radar arrays and communication system) and cooperating with mechanical rats, it has an amphibious and comprehensive coverage. Like an eagle, it overlooks and monitors this huge planet.

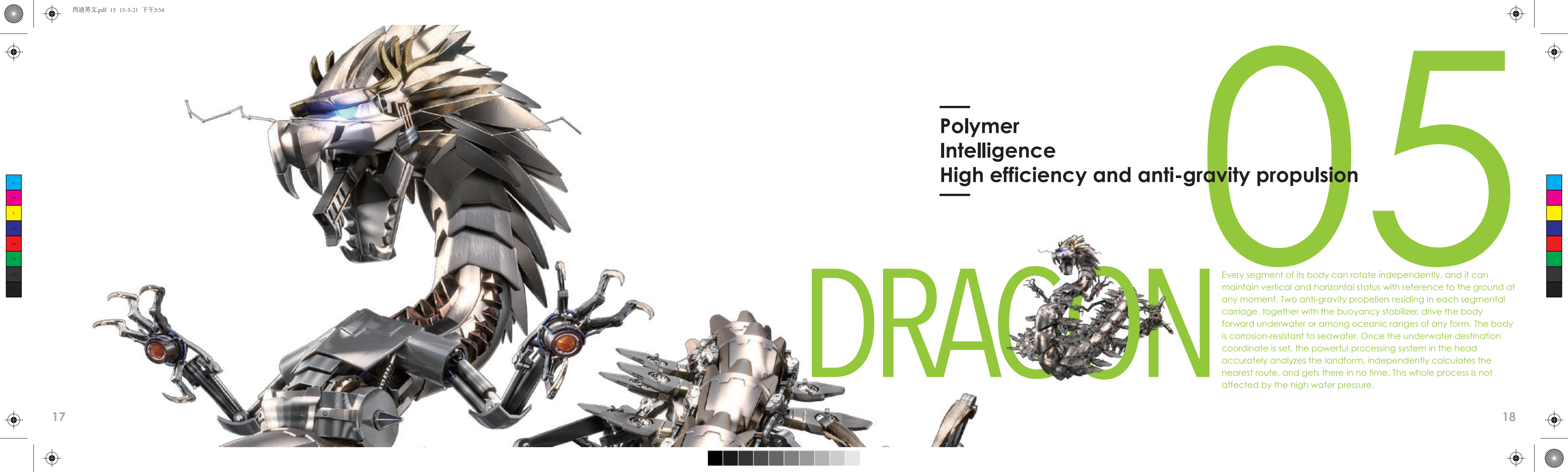


AEROSPACE



04 Impeller series





Polymer
Intelligence
High efficiency and anti-gravity propulsion

DRAGON

Every segment of its body can rotate independently, and it can maintain vertical and horizontal status with reference to the ground at any moment. Two anti-gravity propellers residing in each segmental carriage, together with the buoyancy stabilizer, drive the body forward underwater or among oceanic ranges of any form. The body is corrosion-resistant to seawater. Once the underwater destination coordinate is set, the powerful processing system in the head accurately analyzes the landform, independently calculates the nearest route, and gets there in no time. This whole process is not affected by the high water pressure.



OFFSHORE DEEPWATER ENGINEERING



05 Hard-facing application





A spacious and comfortable passenger carriage inside its strong, round and zigzag body. Each nuclear powered carriage has its own hidden anti-gravity device, which suspends the body and makes it steadily float over the ground. Such configuration offers a smooth ride and stays out of the ground transportation traffic. The multi-carriage design enables the mechanical snake to gallop on all the landforms, such as sea, mountain, jungle, river and others.

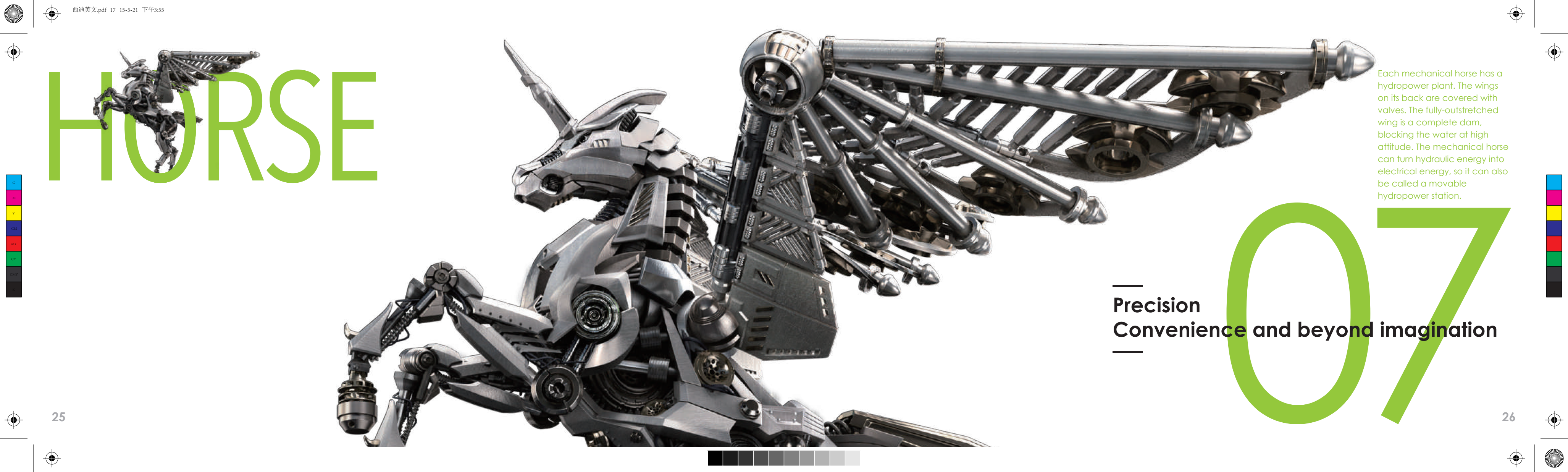
Environment-friendliness
High efficiency
Comfortability and quietness

SNAKE



NUCLEAR ENERGY AND
NUCLEAR INDUSTRY

06 Para 3D series



HORSE

Precision
Convenience and beyond imagination

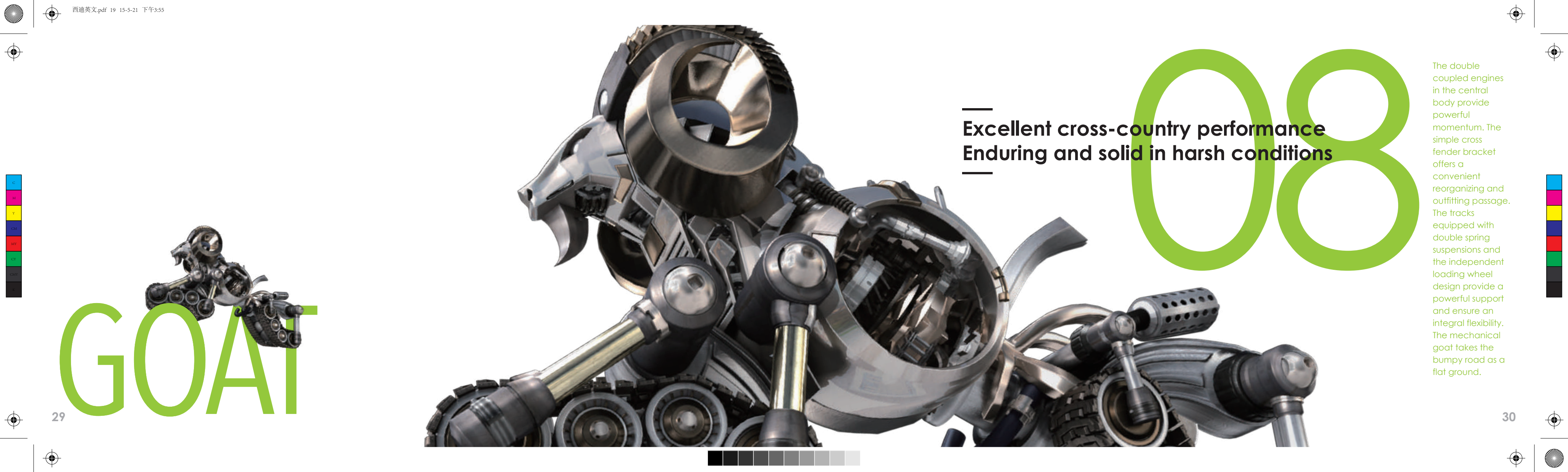
07

Each mechanical horse has a hydropower plant. The wings on its back are covered with valves. The fully-outstretched wing is a complete dam, blocking the water at high attitude. The mechanical horse can turn hydraulic energy into electrical energy, so it can also be called a movable hydropower station.



PUMP VALVE INDUSTRY

07 Valve stem series

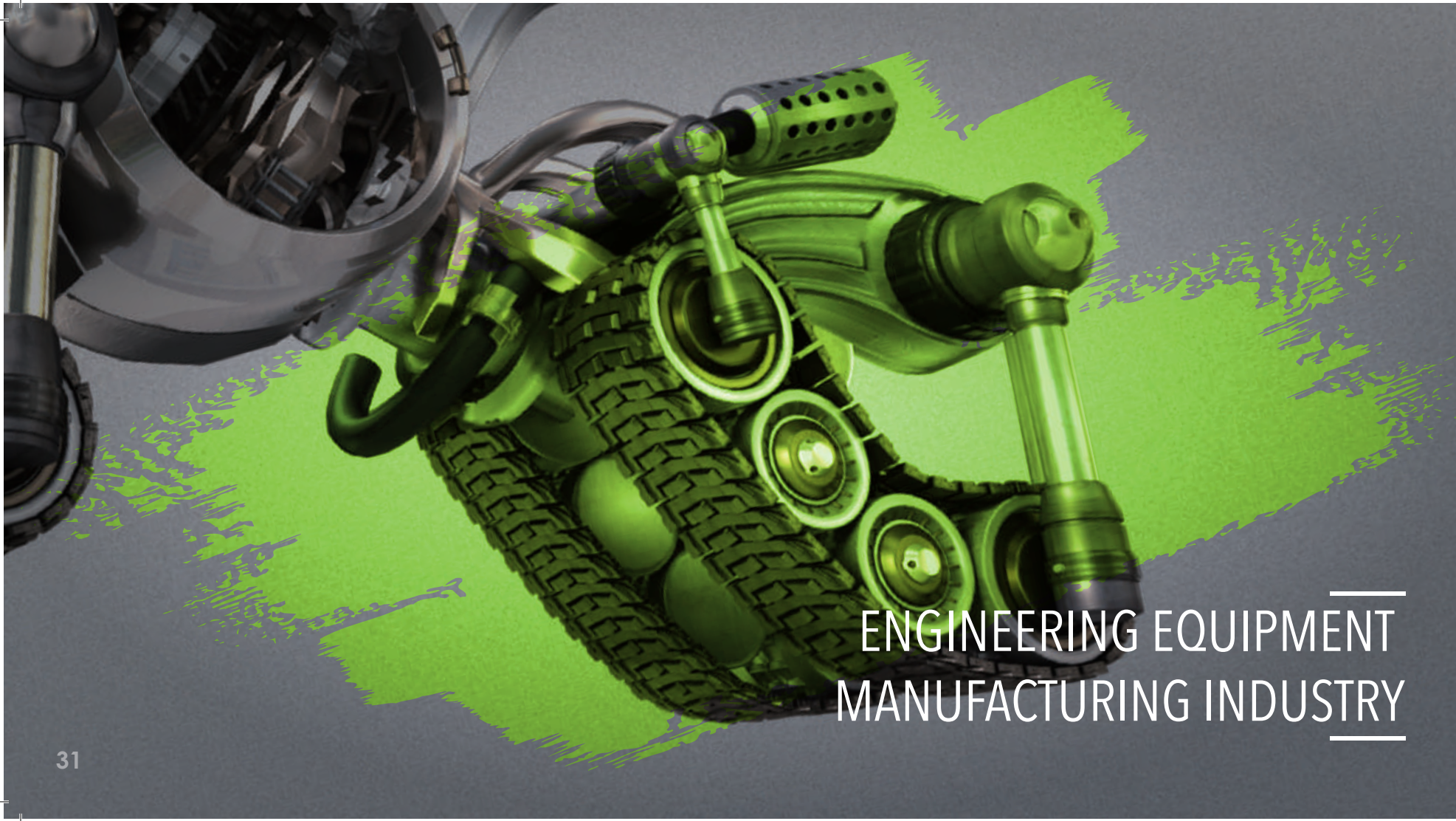


GOAT

Excellent cross-country performance
Enduring and solid in harsh conditions

08

The double coupled engines in the central body provide powerful momentum. The simple cross fender bracket offers a convenient reorganizing and outfitting passage. The tracks equipped with double spring suspensions and the independent loading wheel design provide a powerful support and ensure an integral flexibility. The mechanical goat takes the bumpy road as a flat ground.



ENGINEERING EQUIPMENT MANUFACTURING INDUSTRY



08 Assembly series



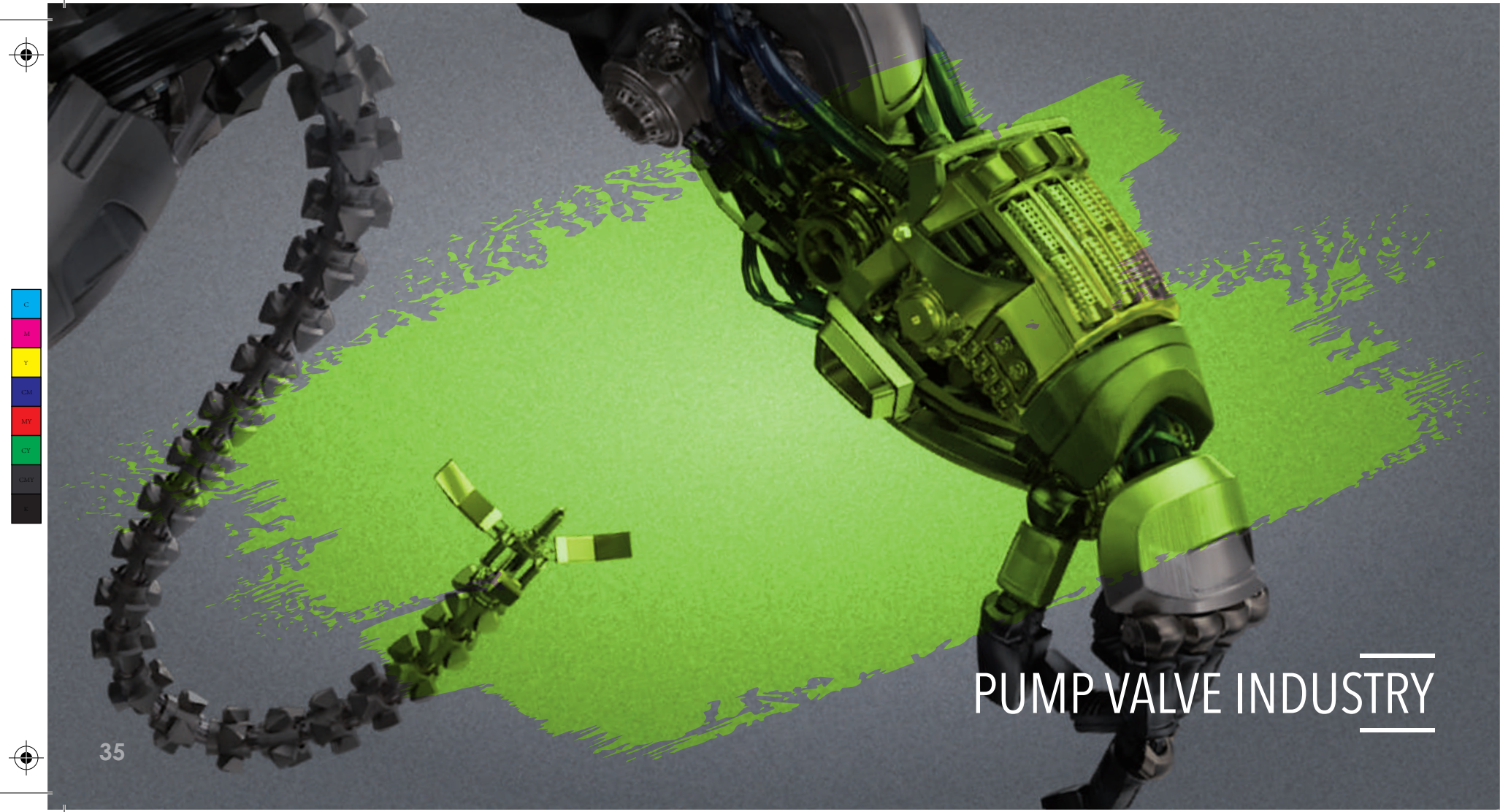


Possessing all essential features of a monkey, such as the rapid and intelligent central processing system, sharp senses, the acute detection and analyzing system, the nimble and robust motion system. Numerous intelligentized manipulators are assembled into its arms, which makes it especially suitable for examining and repairing valves in complex landforms and environments.

—
**Acute
Speediness and agility**
—

MONKEY



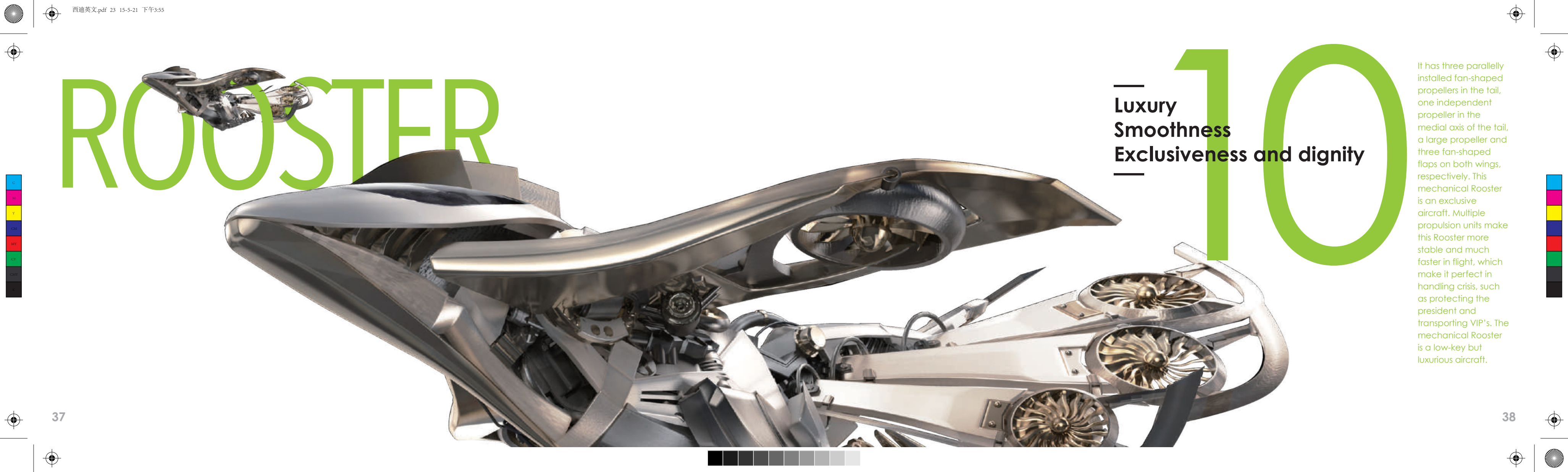


PUMP VALVE INDUSTRY



09 PDC bearing series

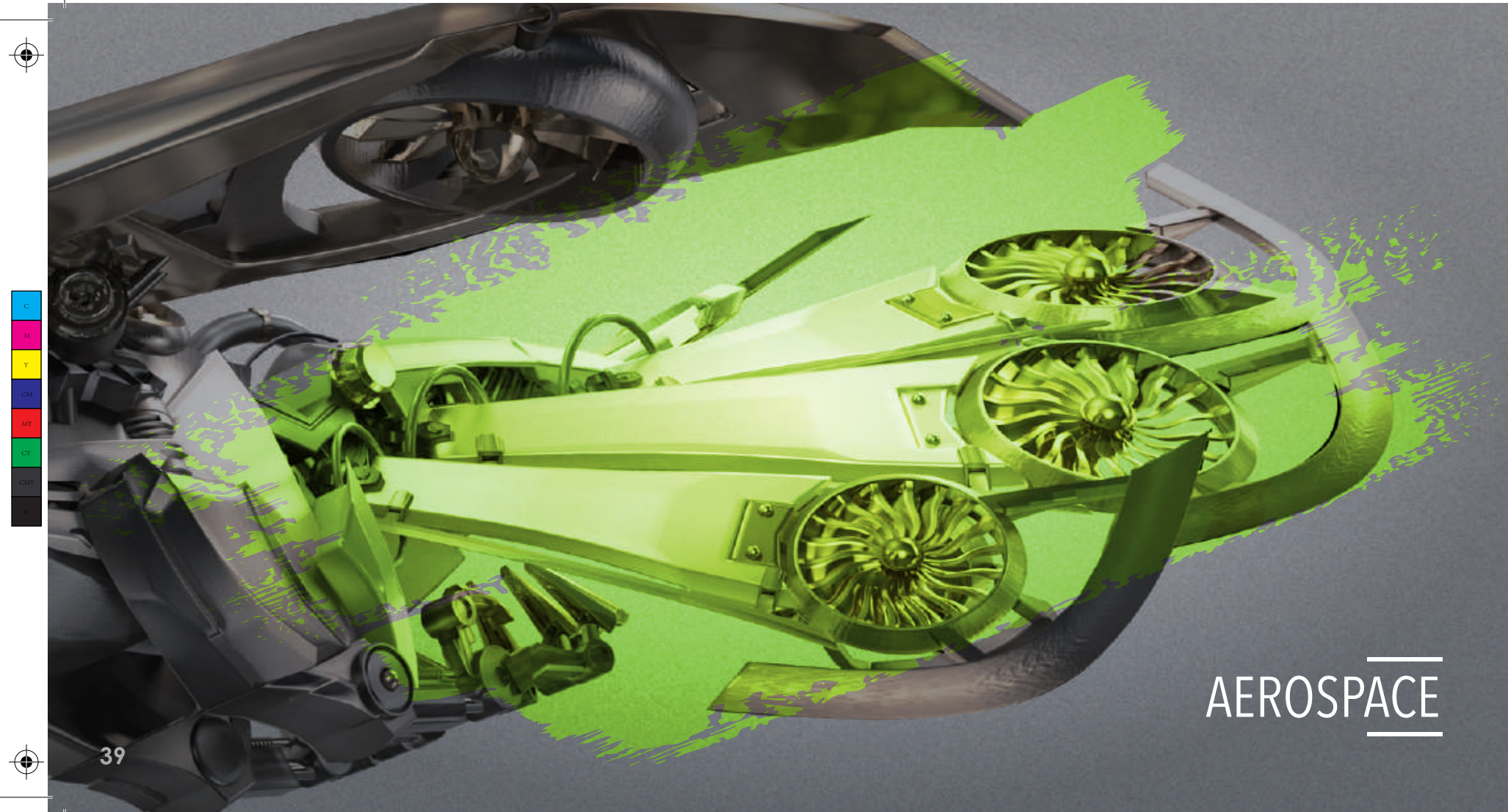




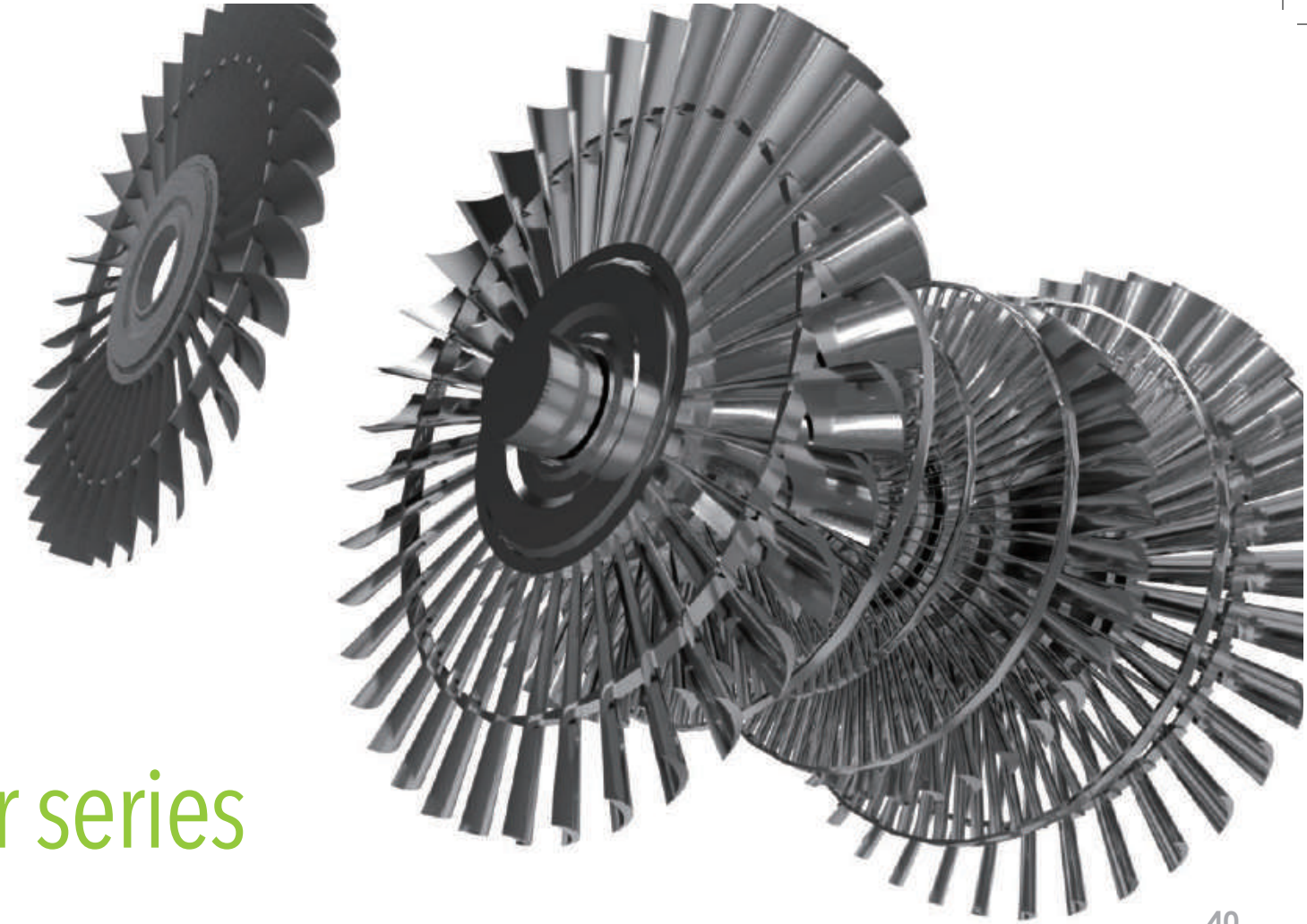
ROOSTER

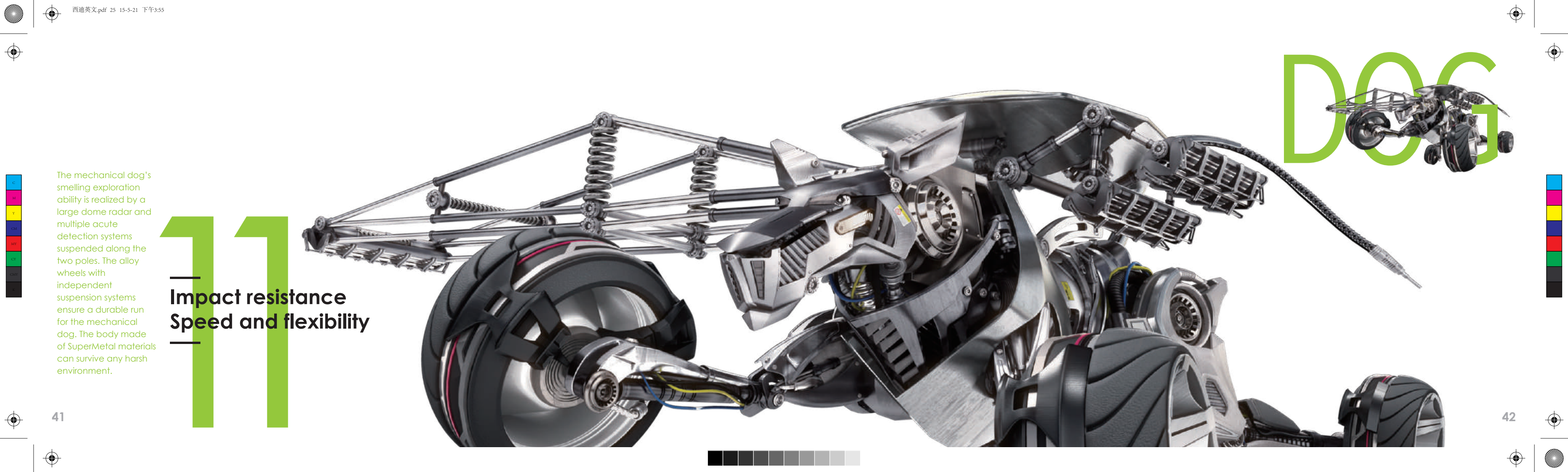
Luxury
Smoothness
Exclusiveness and dignity

It has three parallelly installed fan-shaped propellers in the tail, one independent propeller in the medial axis of the tail, a large propeller and three fan-shaped flaps on both wings, respectively. This mechanical Rooster is an exclusive aircraft. Multiple propulsion units make this Rooster more stable and much faster in flight, which make it perfect in handling crisis, such as protecting the president and transporting VIP's. The mechanical Rooster is a low-key but luxurious aircraft.



10 Impeller series





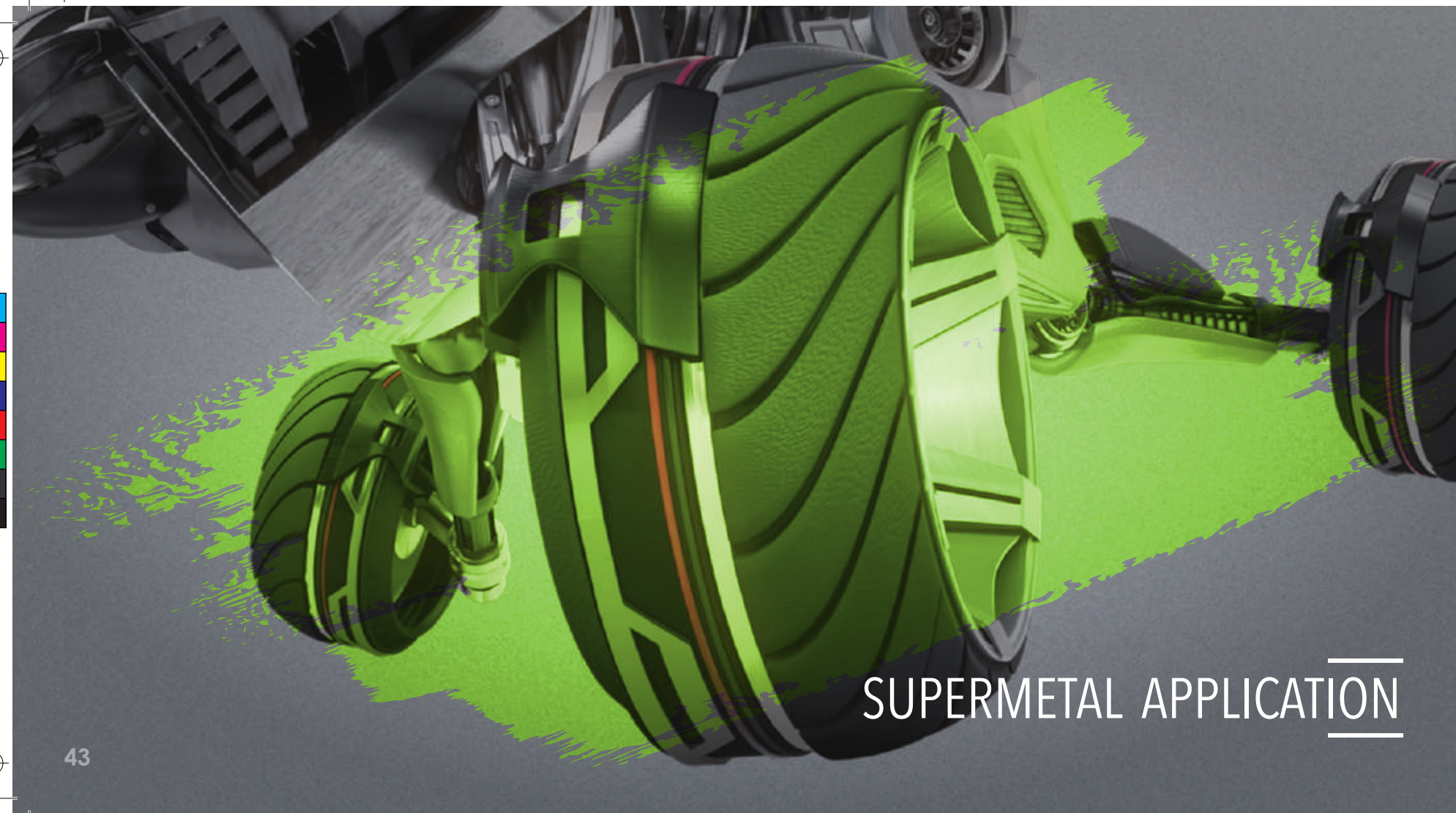
The mechanical dog's smelling exploration ability is realized by a large dome radar and multiple acute detection systems suspended along the two poles. The alloy wheels with independent suspension systems ensure a durable run for the mechanical dog. The body made of SuperMetal materials can survive any harsh environment.

Impact resistance
Speed and flexibility



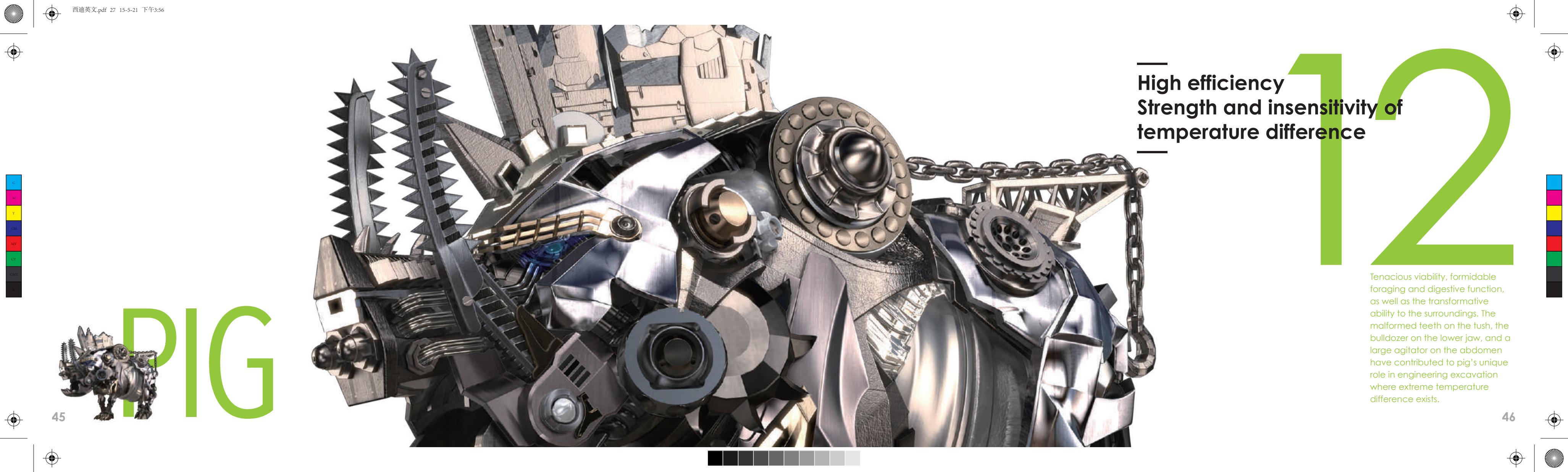
DOG





11 SuperMetal PDC substrates and inserts





High efficiency
Strength and insensitivity of
temperature difference

Tenacious viability, formidable foraging and digestive function, as well as the transformative ability to the surroundings. The malformed teeth on the tush, the bulldozer on the lower jaw, and a large agitator on the abdomen have contributed to pig's unique role in engineering excavation where extreme temperature difference exists.



CHEMICAL INDUSTRY
COAL CHEMICAL INDUSTRY AND
ENGINEERING EQUIPMENT
MANUFACTURING INDUSTRY



12 Assembly series





Grades of cemented carbides for wear resistance and seal elments

Grades	Grain size μm	Density g/cm ³	TRS N/mm ²	Hardness HRA	Applications recommended
ZY06	6	14.95	3200	≥90.2	High wear resistance parts with high quality
ZY06N	6(Ni)	14.95	2700	≥89.7	Wear resistance partsin acidic corrosion condition with high requirements
ZY08	8	14.75	3150	≥89.5	Wear resistance and impact parts with high requirements
ZY09	9	14.50	2970	≥91.7	Conventional wear resistance parts
ZY11-C	10	14.4	2700	≥88.6	Wear resistance parts with strong impact
ZY15-C	16	14.0	≥2920	≥87.0	Wear resistance parts with strong impact

Grades,composition and properties of Rods

Grades	Grain size μm	Cobalt content (wt-%)	Density g/cm ³	Hardness HRA	Hardness HV	TRS N/mm ²	Applications recommended
ZY06X	0.5	6.0	14.90	93	1800	3800	Suitable for machining composite materials,such as aluminum-magnesium alloys,reinforced plastics and carbon fiber, iron-based alloys,etc.It is recommended for making drills for machining aluminum-magnesium alloys.
FL10	0.8	10.0	14.42	92	1600	4000	Suitable for machining common steel,cast iron,stainless steel,heat-resistant steel,nickel based alloys and titanium alloys ,etc.It is recommended for making conventional tools,such as twist drills,end mills,screw tap,gun drills,etc.
FL12	0.4	12.0	14.05	92.5	1700	4000	Suitable for machining titanium alloys,heat-resistant alloys,stainless steel,hardened steel,gray cast iron,glass fiber reinforced plastics,etc. It is recommended for making end mills and ball nose mills of various specifications with a hardness and strength than FL10
YG15	1.3	15.0	14.00	87	1140	4000	Suitable for making solid dies and moulds and tools for punching operations

A SEEDER IS
A BEAUTIFUL
PLANET



Aseeder®

Aseeder is a spin-off of Seed, which is an elevated transformation after numerous innovations. Seed has further enhanced the creation and break-through spirit to a new level, while Aseeder offers innovative solutions to meet the complex and severe mining challenges around the Globe. In the aspect of improving product performance and user demand, Seed has acquired the methodology of replacing the traditional techniques with brand-new materials and processing technologies. Seed introduces "supermetal" to interpret and redefine her products. Seed has never stopped and will never stop marching the road of exploring new materials and new technologies. If you dare to imagine, we take the challenges and bring you the excellent supermetal products, beyond your imagination. The cemented carbide hardmetal era will become more gorgeous because of Seed.

