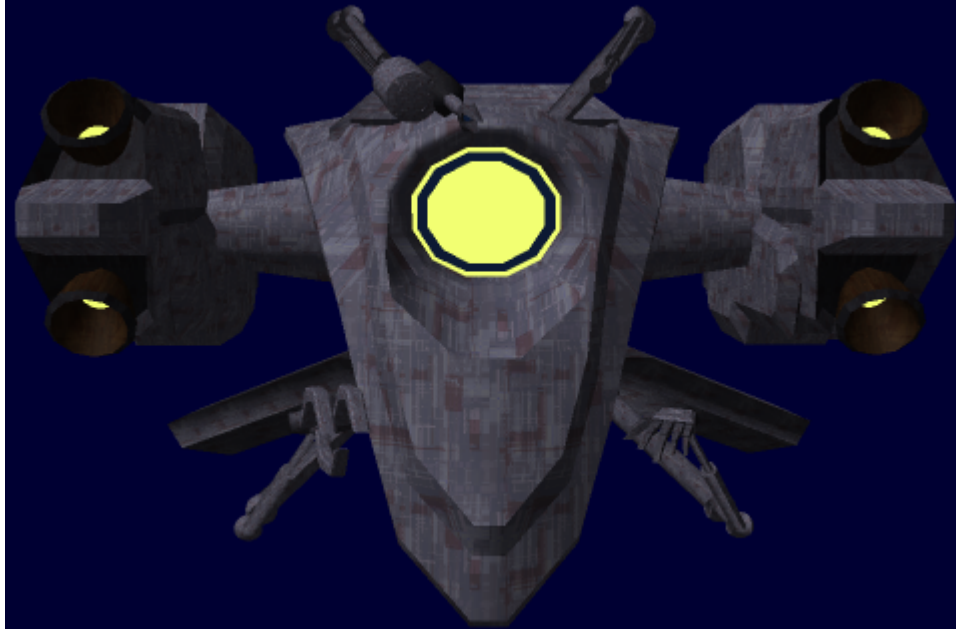


ASD1 Construction/Repair Drone

A relatively primitive design compared to the [Mark I Construction Drone](#), the ASD1 is a reliable replacement in a compact form.



About the Ship

Designed to be an inexpensive replacement for the [Mark I Construction Drone](#), the ASD1 uses reliable technology to do more work with less.

Key Features

The ASD1 has a smaller chassis, no armor, and a usage of [Arcjets](#) for propulsion.

Mission Specialization

The ASD1 is specialized in:

- Deep Space/Orbital Construction
- Starship Repair

Appearance

The ASD1 has a stubby, sloped head section with a large mono-eye visual sensor and four telescopic arms (two on top of the head and two on the sides). A long, flat rear section is used for storage of arm attachments and small materials. Underneath the flat section is a rotating joint with a series of three [Arcjets](#) attached to each side.



Side view

without arms

History and Background

Designed in [YE 29](#), the [Mark I Construction Drone](#) was an awkward drone design when it was first rolled off the assembly lines. Large and fast, it had a difficult time working in shipyard environments due to its

fusion engine. While good in Deep Space Operations, there were still quite a few accidents due to it's fusion engine melting projects.

Because of this, [Kaiserlich F&E](#) went back to the drawing board entirely. Designing the ASD1 in [YE 33](#), the scientific team used old technology from the After Conflict Era and combined them with modern design philosophies and material sciences. Slower and smaller than it's predecessor, the ASD1 is believed to be a more cost-efficient and effective way to minimize orbital/deep space construction accidents as well as increase productivity. It is also safer to operate near active starships in need of repair.

Statistics and Performance

General

Class: ASD1 Type: Autonomous Drone Designers: [Kaiserlich F&E](#) Manufacturer: [Abwehran Imperial Yards](#)
Production: Mass-produced¹⁾ Fielded by: Everyone; 31,000 Credits per unit (11,000 KS)

Passengers

Crew: 1x [drone_vims](#)

Dimensions

Length: 2 meters (~6.6 feet) Width: 1.6 meters (~5.2 feet) Height: 0.7 meters (~2.3 feet)

Propulsion and Range

Sublight Engines: 200 m/s (3 Gs) Range: 48 hours Lifespan: 2 Abwehran Years Refit Cycle: To be recycled after 2 Abwehran Years (8 Standard Years)

Damage Capacity

See [Damage Rating \(Version 3\)](#) for an explanation of the damage system.

- Hull: 5 Armor SP

Inside the Ship

Compartment Layouts

Maintenance Access Points

Small Access hatches located in 20 points to allow Mechanics access to all of the ASD1's vital systems. They are only large enough to reach into and cannot fit humanoids.

Ship Systems

Armored Hull and Hull Integrated Systems

The ASD1 does not have armor at all, but uses a [standard civilian hull structure](#) on top of a chassis of titanium trusses.

Computers and Electronics

The ASD1 runs its [Drone Virtual Intelligence Model](#) upon a [CU-23](#).

Communication

- [Radio](#), Civilian Small Craft

Detection

- [Civilian Radar](#)

Construction/Repair Equipment

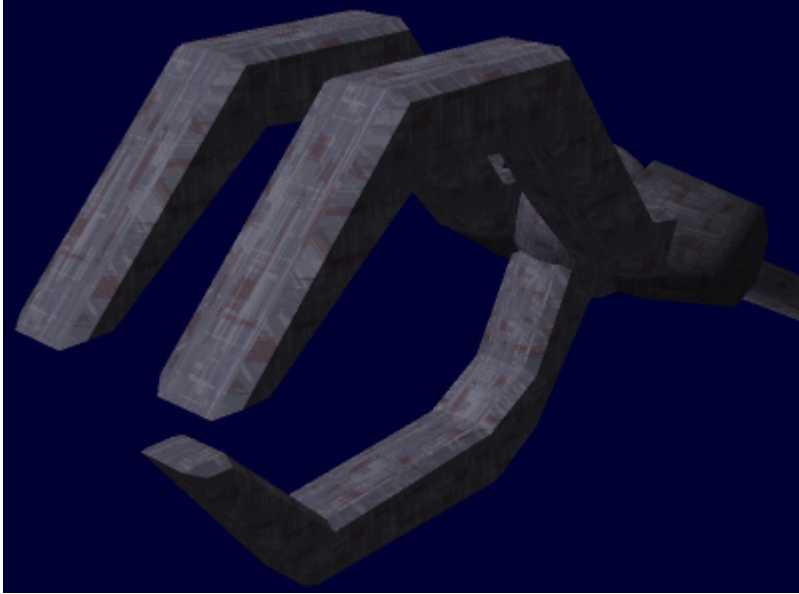
Anchors

A pair of struts protruding from the 'head' section hold a pair of anchors and 1 kilometer of woven, carbon-nanotube cables each. One anchor is a barbed dart used to pierce rock or soft debris to hold the ASD1 in place while the second type of anchor is a magnetic plate used for metallic objects.

Arms and Attachments

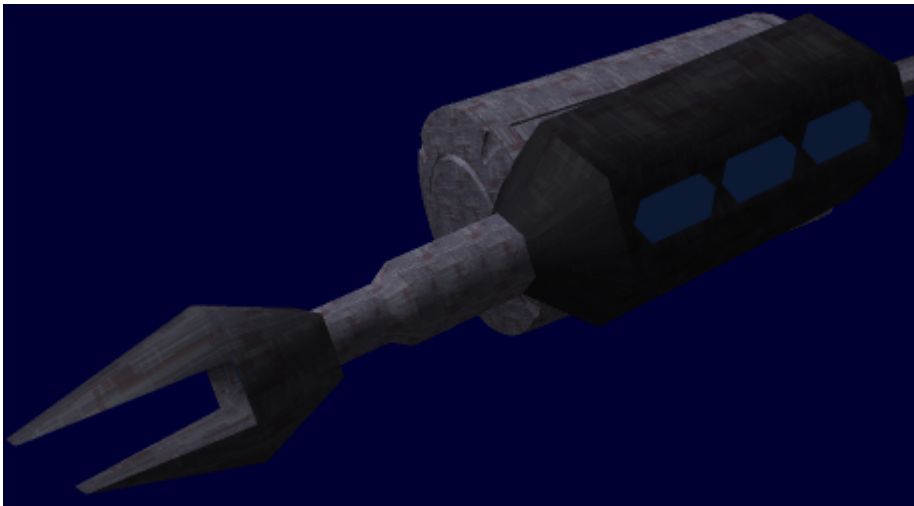
The ASD1 has four telescopic arms located around it's 'head' section. Each arm has the ability to fit a different type of tool and can extend to a full length of 2 meters beyond the drone's chassis.

Grappler attachment



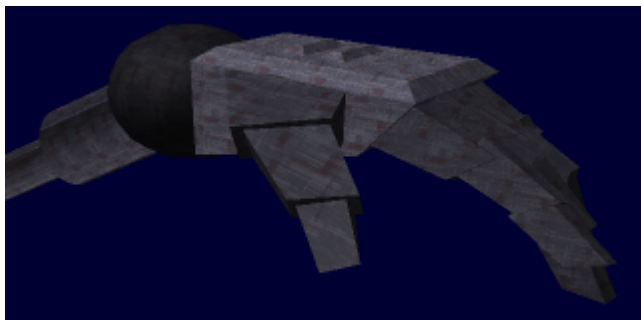
A tri-finger clamp attachment, the Grappler is used to physically grab debris or construction material.

Laser Torch/Welder attachment



A simple free-electron laser that is used to either weld material together or cut it apart. It can also be used in mining operations to cut off chunks of asteroids for transport to refinery vessels.

Manipulator attachment



A five-finger attachment resembling a hand, the Manipulator is designed for more delicate work and is especially designed to minimize pressing in order to protect against crushing valuable building materials.

Power Systems

Many of the main systems use a pair of [solar-charged batteries](#) to power it's equipment and AI. However it does have a [D-H3 Secondary Fusion Reactor](#) to power it's sub-light engines.

Propulsion

The ASD1 is the first design to using 6 [Arcjet](#) motors to propel itself around a damaged vessel or a ship yard.

1)

Comes equipped to all AIY designs with Drone Hives

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