

Karox's Guide To Almost Everything in Eve **Part 10 – Capital Ship Production**

This guide is focused on the production of Capital Ships. It requires at least a basic understanding of how the industrial/production system works in Eve, which can be read up on in detail within my guide in issue 14 of EON. A very basic overview will be included in this guide but note that due to the complexity and cost involved with capital ship production, it should not be entered into lightly.

Capital Ships – A Quick Overview

The first question that needs to be answered is quite simply 'What are capital ships?' Within the universe of New Eden, capital ships are those that are the centrepiece of corporation vs corporation and alliance vs alliance wars. They are piloted as usual by a single pod pilot, and generally provide many bonuses and abilities to fleet mates when they are supported by these gargantuan craft. They are usually fairly poor soloing ships, as they are simply too big for most operations, and require fleet support to defend themselves from attacking Battleship gangs and the like.

Of course, as well as combat, there are those that are dedicated to industry and logistics, there are supermassive transport ships known as Freighters which can carry several hundred thousand cubic meters of cargo in their holds, plus the ever resourceful ORE syndicate have commissioned 2 ships specifically for industrial use – the Orca, and its big brother, the Rorqual.

The different types of Capital ship are as follows:

Carriers – support ships used with a view to remote repair/reinforcement as well as having access to corporate hangars and ship transportation bays to move your fleet with as much convenience as possible. They also have the assistance of fighter drones, which are 'smart' drones able to follow the target as it warps off.

Dreadnoughts – Siege warfare engines designed to POS warfare. These are as vast in comparison as a Battleship is to a Cruiser – a dreadnought is designed to destroy large stationary targets and is not very well suited to ship vs ship combat.

Motherships – These are improved versions of carriers – able to provide greater support, and also able to loose fleets of fighter drones for combat and defence alike.

Titans – The centrepiece of any fleet battle, the Titans operate as mobile bases, with access to corporate hangars, ship storage areas, as well as the ability to launch a jump portal which can allow ships to travel without the aid of a stargate. They have no conventional weapons available to them, but can instead fit Doomsday weapons – vast pulse weapons designed to decimate entire areas of a solar system in one fell swoop.

The four 'classic' types of capital ship identified above, and the Rorqual industrial capital ship are simply too big to use the stargates that are placed in space for travel, and instead need to rely on their jump drives for travel, which requires fleet support to open a Cynosural field in the destination system which can then be targetted for the jump – unfortunately this can only be targetted in lowsec, so this limits the capital ships to those desitinations (note there is at least one Dreadnought stationed in a Highsec system which can no longer move away from it's base or else it will never be allowed to return). The Orca and freighters can fit through standard stargates, and can't

jump.

Production – An Overview

Production in Eve comprises of 3 items – the blueprint, the materials, and the production facilities. Blueprints can be researched to improve their characteristics, specifically the main focus of these is ME research (material research) which reduces the waste from the blueprint as each comes with an inherent wastage factor which ideally needs to be reduced in order to make the blueprint profitable to work with. Blueprints are available as Originals (BPO) from the various NPC corps, or Copies (BPC) which are created by other players and are traded either directly or via contracts (they can't be listed on the standard market)

Materials are for the most part, available from either asteroids via mining, or from processed loot drops from missioning. They are all commonly available, but some items are much more prevalent in lowsec and 0.0 space, meaning they have an increased cost due to the risk involved in transporting them. All minerals are available almost anywhere on the market if you wish to simply buy the items you need, but if you are prepared to shop around and gather some yourself you can save millions from large production jobs (typically the high quantity material Tritanium, which is well known to suffer from spikes in cost as entire regions are sometimes bought out to fund big construction projects)

Production facilities can either be in a station or POS (see part 5 of the guide for an introduction to the POS) – typically stations are much more versatile, being able to produce items from any category, whereas as POS needs to have a specific type of production facility installed to do a specific item – for example there are assembly arrays which are specific for small ships, some for ammo and so on. When producing capital ships, this becomes very important, as many of the largest ships available in Eve will not fit within an NPC station and can only be manufactured/docked within an array at a POS.

In order to produce items, some skills are very important – Production Efficiency for instance cuts down your 'incompetence factor' which every character has – without this skill trained to a high level, no amount of material research will improve the blueprint beyond a certain level. There is an additional 20% waste that is applied until you train this out at 4% per skill level. In order to begin producing capital ships, you will need to train this skill to level 5 as it is a prerequisite of the capital ship construction skill itself.

The skill Industry helps by reducing your factory running time once the job has been installed and is running, again, this is needed at level 5 as a prerequisite to gaining the capital ship construction skill.

One skill that is not specifically needed to train the skill, but is highly recommended is to train up Mass Production, and its direct follow on, Advanced Mass Production. This skill gives you one additional simultaneous factory operation per skill level, and due to the vast number of operations that are required for capital ship production, the old adage applies – the more the merrier.

Disclaimer

Now, before I move into the guide, one thing that must be made very clear is that Capital Ship production is not intended for the individual. It is mainly focused around specialised corporations, or entire alliances. The principle reason for this is due to the cost involved – each of the blueprint originals for the capital ships components range in price from 800

million Isk to 1.7 billion Isk and that's even before worrying about getting a ship blueprint to make something with the components. Capital ship blueprints are usually in the region of 2 billion Isk for carriers, up to 70 billion Isk for Titans. These blueprints are 'raw' and unresearched, there will be a lot of time investment required to make the blueprints ready for production.

With that being said, there's no reason why one person with incredible financial backing and a strong skill backbone can't produce capital ships themselves, and indeed, there are ways and means to do it – specifically purchase of blueprint copies of the components which will be cheaper to buy rather than buying the BPOs outright.

Skills

As has been mentioned previously, there are some prerequisite skills needed for the production of capital ships – specifically Mechanic level 5, Industry level 5 and Production Efficiency level 5. Completing these skills will allow you to train the skill Capital Ship Construction which is the key to accessing the various blueprints required. Capital Ship Construction is a little different to most skills encountered to date in that it doesn't improve the output in any way, shape or form, but instead allows you to produce different ship types blueprints as you improve the skill.

Level 1 – Capital Ship Components, Freighters, Orca

Level 2 -

Level 3 – Dreadnoughts, Carriers

Level 4 – Rorqual, Jump Freighters, Motherships

Level 5 – Titans

Note that there is currently nothing (to my knowledge) that requires skill level 2 in order to be produced.

As with most items involving capital ships, the skill itself is quite pricey – the base price for the skillbook itself is 75 million Isk. The price is not prohibitive itself, but it can be quite a large expense if it is not going to be utilised to the full. The skill is rank 14, which is quite high (and consequently provides a very long training time), but it is comparative to most skills relating to capital ships.

Capital Ship Components

The heart of capital ship manufacture is within the component system – it makes construction of capital ships into a 2 step process whereas production of Tech 1 items usually use the mineral directly. Capital ships require capital ship components, which are in turn produced from the base minerals. There are 19 construction component blueprints which vary in commonality between ships – for example Capital Doomsday Weapon mounts are only used on Titans, whereas Capital Armour Plates are used on every ship.

There are advanced capital ship components for Tech 2 ships which are produced with the assistance of moon minerals, but as the only Tech 2 capital ship available on the market is currently the Jump Freighter these can usually be avoided for those who simply want to produce capital ships for fleet combat, as these simply only use the base minerals.

Researching Capital Ship Blueprints

Capital ship blueprints can be researched with the same methods as standard Tech 1

blueprints – i.e. there are no additional skills needed to begin the research operation, but it should be noted that research on capital ships and capital ship components will take a very long time. For instance, blueprint components can need around 18 hours per ME level increase, whilst increasing the ME level on a Leviathan, the Caldari titan will take almost 8 months per level. It is with these times in mind that increasing skills such as metallurgy (to cut down the time the ME research takes) and using POS labs for research (giving a flat reduction to the time it takes to research based on the lab type) can prove very beneficial.

These long durations for research are a major limiter in a single person capital production operation, as a single person can only have 11 research slots at any given time, but there are ways around it – alt characters with research slots are an option for instance.

There is quite a good market in selling copies for those who wish to invest in a BPO for capital ship components. The copies can be quite profitable as there are many who are interested in creating the components for a 1 off project, but do not wish to invest in a full set of BPOs because of the associated expense and time required to research them. Copying capital ship component blueprints will create 5 run BPCs which can then be sold on the via contracts. Capital ships are typically sold with 1 run copies (in fact many can only produce single run copies in the first place). Many seasoned capital ship producers may sell occasional 'bulk packs' of blueprints for the ship and the components required for the build together in one go – just keep in mind that whilst your blueprint is copying or otherwise being researched, it isn't available for production – so spending all your time copying blueprints could be a potential detriment to your construction business if you find you need to get some components quickly and your blueprint is still going to be busy for several weeks. Typically a max run copy (5 runs) will take a little over 3 and a half days per cycle.

Building the Capital Ships

Capital ship components can be produced anywhere that doesn't have a specific limitation on construction type (i.e. they need to be built in the specific type of array in a POS, but can be built in any station, low sec or high sec) – the main issue with this is that the components themselves are quite bulky, at 10,000m³ per item, this limits moving them around to freighters and the larger transport ships/industrials. Note that as a comparison, the Capital Armour Plates, which are 10,000m³ each, require minerals which in total require a cargo space of around 5800m³ before production. This significant increase proves to be a great hindrance when trying to move the capital ship components from station to station.

The quantity of components should also be kept in mind when you are planning to produce your ship – you could need less than 10 of a certain component to produce a carrier for example, whereas to produce a Titan, you could need around 500 of each.

Building the capital components 'on site' to the main area you are intending to build the final capital ship assembly is therefore usually seen as an optimal solution, but as you will see later, there are times when the final assembly can't be done in a station, and also times when a station isn't available (specifically when out in 0.0 space where stations are few and far between.) This means that the components will need to be made in a component assembly array as part of a POS. When you build them using this method, you should keep in mind the inherent 1.1 material modifier for the component assembly array, which means that it will always cost more materials to manufacture the components at the POS rather than in a station. If this outweighs the risk involved in moving the

components around with a freighter is the main question that faces most capital construction industrialists.

Freighters and the Orca can all be produced in highsec (eliminating the need to move the capital components around if you produce them in highsec) in any station, and also within a large ship assembly array, which can be anchored in a POS in any security level.

Carriers and Dreadnoughts can only be built in lowsec, either in a lowsec station, or in an X-Large assembly array. This can only be anchored in 0.4 or below security, but does allow the production of freighters and the Orca as well as the Carrier and Dreadnought if required. If you are using a POS assembly array, a maintenance array also needs to be in place to accept the ship output when construction is finished.

Obviously, if you are producing the components in highsec and transporting them to lowsec, logistics of transport becomes the main worry, for this very reason, many people decide to produce the components in lowsec as well, instead worrying about the logistics of moving the vast quantities of materials required rather than the individually large assembled construction components.

Motherships and Titans are a special case. They can only be built in a Capital Assembly Array (and loaded to a Capital Maintenance Array) which requires 0.0 space and system sovereignty. These 'supercapital' ships cannot be docked in station, and instead need to be loaded into the maintenance array when they are unpiloted or else anyone with the appropriate skill can simply board the ship and fly off in it. This limits their production availability to large alliances that can hold 0.0 space sovereignty, and defend it.

If the array is destroyed in the middle of construction (building a titan with the industry 5 prerequisite skill will take around a month and a half) the ship and all materials are lost, so of course, this is a very risky project to undertake, especially due to the sheer amount of money invested into each single Titan.