KLINGON
K’T’INGA-CLASS
SPECIAL ISSUE

K’T’INGA-CLASS
ACTIVE: 2271
KLINGON BATTLE CRUISER
LENGTH: 214 METERS
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**KLINGON BATTLE CRUISER**

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![KLINGON BATTLE CRUISER](image-url)
The K't'inga was the classic Klingon warship – a powerful weapon that served the Empire for over a century.
In the latter part of the 23rd century, the K’t’inga-class represented the state of the art for Klingon military technology. The large battle cruiser, which was roughly equivalent to Starfleet’s Constitution and Excelsior-class ships served on the frontline of the Klingon borders and provided Chancellor Gorkon with his flagship, Kronos One.

The K’t’inga-class was an upgraded version of the D7-class battle cruiser, which was first introduced in 2256 as part of Chancellor L’Reil’s efforts to unite the different Klingon houses. The fundamental layout remained the same with twin nacelles on either side of an engineering section that was connected to the head by a long neck. The ship was heavily armed with disruptors and photon torpedoes. It was capable of high warp speed and was routinely used to patrol the borders of Klingon space. Despite the impressive power of an individual ship, they were occasionally seen operating in groups of three, such as the three battle cruisers that were lost when they intercepted the V’Ger entity in 2271.

The K’t’inga-class remained in service well into the later years of the 24th century, when they were slowly replaced by the new Vor’cha-class. A significant number of K’t’inga-class ships took part in the Dominion War, when they both suffered and inflicted heavy casualties.

△ The bridge of the K’t’inga-class was located on top of the ship’s ‘head’ and was dominated by the command chair.
DESIGNING THE
KLINGON
BATTLE CRUISER

The Klingon battle cruiser is one of *STAR TREK*’s most enduring designs, but the producers didn’t always think they needed it.

When they were filming *STAR TREK* in the 1960s two things were particularly rare: recurring aliens and spaceships. The Klingons returned occasionally, but they were never part of a grand plan. New spaceships were prohibitively expensive and were mostly represented by dots of light on screen. So, as they entered the third season with budgets that were tighter than ever, the production team had no plans for a Klingon battle cruiser. “We had no need for a Klingon ship,” production designer Matt Jefferies explained, “nor did we have a budget to
do one, or time to design it or build it.’

However, in the first season, modelmaking company AMT had made a very successful kit of the U.S.S. Enterprise. “That model sold over a million the first year,” Jefferies explained. “So AMT wanted a follow up.”

As they had with the Galileo shuttlecraft, AMT offered to build a model for the show as long as they could have the rights to build a kit of it. *STAR TREK* didn’t have a detailed model that could be used for the bad guys so the producers agreed, but, as Jefferies explained, it was always a side project. “I designed it at home because there was neither the time or the money to do it at the studio. Gene pretty much left me on my own. Primarily it was done for AMT but it was something that would fit the show and we did use it.”

Jefferies wanted the design to reflect the Klingons’ nature which he thought of as “cold” and “vicious.”
“The Klingons were supposed to be pretty wicked people,” he said, “so I wanted their ship to have something of a killer potential that would look wicked. Naturally, I thought it had to look as far out as we thought the Enterprise did.”

With this in mind, Jefferies sat at his drawing table and tried to draft out something, but, just as with the Enterprise, he didn’t find it to be an easy process. “I was after a shape but I didn’t really know what it would be. God knows how many sketches there were. I saved some of them but I’m sure I must have trash-canned maybe a hundred balled up pieces of paper. It was like when you make a mistake in arithmetic – you keep going back over the same piece of paper and you keep making the same dumb mistake. Somewhere you’ve got to throw it away and start from scratch. I don’t know how many drawings were done on it. Sometimes, if you felt you had something, which could be kind of rare, you turn it around as many ways as possible and all of a sudden something may pop up that makes more sense.”

Jefferies wanted the ship to look as if it used roughly the same technology as the Enterprise, so he gave it nacelles (or engine pods as he always called them) a neck with a head on it, and a body. Initially, he returned to an idea that he had rejected when he had designed the Enterprise (which he had also designed) but with new shapes and a different layout.
“Basically, I was feeding on a stingray, or the manta, for part of the shape. Even though it is not dangerous, I think a lot of people think the manta ray has a very vicious look to it. Yet to see it swimming, like a shark, it is a very graceful thing. I was trying to get all of that and still have something that looked far out.

"Once I was happy with the basic sketch, I took that and hardened it; established what size it would be in relation to the Enterprise and did a scale drawing and that’s what we handed to AMT.

It was a full engineering drawing."

AMT then made two tooling masters of Jefferies design. Jefferies was pleased to see how faithfully they followed his drawings, and made regular trips to supervise AMT’s work.

"I made three trips out there at their expense. The master models were quite large, probably close to 18 inches across, I guess. Then they made the molds using what they call a pentagraph, where a stylus traced its way over the master model, and the other end of it carved out the
Jefferies based the shape of the new ship on a Manta ray, which he thought looked threatening. He produced dozens of drawings trying to find the right approach, before he settled on a design he liked.

**READY FOR ACTION**

“I was there, it was about 2 o’clock in the morning, when they ran the first two or three through the machine. There was flashing in some places. They said, ‘We’ll take out a fraction here, and a fraction here.’ Then they’d run two or three more. If I remember correctly, it was about 10 o’clock when the first one came out they said was perfect. They ran maybe another half a dozen, and checked those out. Then the machine was put in operation and after that one came out every 20 seconds.”

The model went on sale in August, a month or so before the Klingon ship made its debut on screen.

Around the same time D.C. Fontana wrote a piece for ‘STAR TREK’ Insider’ that revealed the thinking about the layout of the ship. She placed the bridge in the “top front of the bird-like head,” which she said also contained “quarters, labs and armament control.” She revealed that weapons were located on the underside of the head, where they were combined with a sensor, and along the leading edge of the wings, which contained “storage, fuel, power source, environmental control units, etc.”

Meanwhile, Jefferies had taken one of the tooling masters with him for use in filming. He painted it himself. “The coloration came directly from a shark. It’s a grayish-green on top and a lighter gray underneath.” The Klingon symbol,
Even when the design was all-but final, Jefferies was still considering alternate ways of laying it out. This version shows the warp nacelles mounted on the top of the engineering hull.

This was the final sketch for the battle cruiser. Jefferies also produced a series of detailed engineering drawings that AMT could use to make the final model.

The model was shot by the Howard Anderson Company, who handled most of STAR TREK's effects. The first script to feature the ship was “Elaan of Troyius,” which was the second episode of the season to be filmed but the thirteenth to be broadcast. However, the Klingon battle cruiser made its first appearance in “The Enterprise Incident.” The producers were keen to make as much use of their new model as possible. This story involved the Enterprise facing off against Romulan ships. In order to make use of their new model they decided that the Klingons and Romulans had entered into an alliance and the Romulans were again designed by Jefferies, made its first ever appearance on the top of one of the wings. "The logo had to be something small and compact that you could recognize quickly," Jefferies remembered.
now using Klingon ships. The footage was used again in "The Day of the Dove."

Several years after STAR TREK was cancelled, the original master model was donated to the Smithsonian. The battle cruiser made a handful of appearances in STAR TREK: THE ANIMATED SERIES, where Kor’s ship was named the Klothos.

THE KLINGONS RETURN

When work began on the aborted TV series STAR TREK PHASE II in 1977, the producers decided that the Klingons would return. They were slated to appear in a two-part story, ‘Kitumba,’ which would have seen Kirk and his crew venture deep into Klingon space in an attempt to prevent a war, and in the pilot, when V’Ger would wipe out three Klingon ships on its way to Earth.

During pre-production, work began on the VFX models and the production team retrieved the original model from the Smithsonian so that visual effects company Magicam could make a new one. Magicam took detailed measurements and created a new mold, but they were still working on the model when Paramount decided to upgrade the television series and make a movie instead.

At this point Robert Abel and Associates were brought in to supervise the effects. Abel’s art director Richard Taylor asked Magicam to build a

The script for STAR TREK: THE MOTION PICTURE opened with three Klingon battle cruisers encountering V’Ger and apparently being destroyed. The various VFX teams produced different storyboards for the sequence, including these.
new version of the model because it needed more detail if it was going to be used on a big screen. In an interview with American Cinematographer, Magicam’s Jim Dow said that at one point Magicam proposed building an eight-foot-long version of the model, before the Abel team asked for it to be scaled back to four feet.

CINEMATIC UPGRADES

“We did re-build the Klingon ships,” Taylor remembers. “One of the things we did with all of the models was to give their surfaces details and interesting designs. A smooth object has no scale so it’s important in model work to find ways of creating scale. Sometimes it’s very subtle but it’s one of the most important elements in model photography. We re-designed all the surface textures, the photon torpedo tube and many other details. I tried to put a kind of bird-feather design on the surface.”

Taylor also asked Magicam to change the shape of the module on top of the head. It had been shaped like a bean sitting on the surface, and now became a ‘tower’ with sloped sides.

Early on in the building process, Taylor brought one of his concept artists Andrew Probert with him to Magicam to check over their progress, but as Probert remembers he had some concerns about the model that was on offer.

“The Klingon battle cruiser was about half finished at that point. I took a look at the model and I whispered to Richard, “The neck is crooked on that ship.” It was actually tilted down. Being a STAR TREK fan, you recognize shapes right away, and I could tell that they’d built it wrong. Richard was compelled to point that out. Of course, they were instantly insulted, but after studying the plans it was discovered that they had used the wrong line on the drawings for the centerline.”

Another concept artist Greg Wilzbach produced drawings for revised warp nacelles. Even at this point Taylor wanted to add more detail to the model. Probert remembers taking photographs of Magicam’s existing model and sketching new details over them.

“There weren’t a lot of changes,” he recalls.
“Most of them were cosmetic. I was very into gun placements, because before that it was anybody’s guess as to where these phasers were firing from. So I put gun emplacements around the Klingon ship and created a hangar bay for its shuttles, and just did a lot of small detailing. One of the modelers working on the skin detailing came up with the idea of creating a feather-like plating on the ship, and it was wonderful. In order to see it better we enhanced it with thicker echoings of that pattern, so that’s how that developed.”

Magicam did use castings from their PHASE II molds to create some simple shells of the Klingon battle cruiser, which they planned to blow up when the beam from V’Ger hit them.

By this stage Magicam had done a lot more work on the model than they had ever anticipated and were concerned about the budget. Abel took over the models and set up their own model shop, where they took over the detailing work on the battle cruiser. Mark Stetson, who worked for both Magicam and Abel picks up the story. “Once the model was delivered to Robert Abel & Associates, Magicam deemed their work contract complete. Abel set up a modelshop at Seward Street, under supervisor Dick Singleton, to continue with design development and detailing. Ricard Taylor’s designer Andy Probert would visit the modelshop at Seward and work hands-on with the models, doing detail and paint work alongside the model crew. The model crew included Dennis Schultz, Zuzana Swansea, Joe Garlington, Chris Elliot, and later in January 1979, me.”

▲ Probert also produced sketches showing a variety of details. The Klingon typeface makes its debut in the film. It was never used on the wings as Probert suggested but did appear in graphics on the bridge.
By the time the Klingon model had to be filmed, Abel and Associates had left the production and Doug Trumbull had taken over the effects work. Because of the tight schedule, he brought in John Dykstra, who was given responsibility for filming the Klingon sequence that would open the movie.

Dykstra wanted a shot that came in close on the bridge of the Klingon ship before flying over the top. This meant that an area of the model that was only a few inches across had to fill a massive cinema screen. In order to make this work the model was upgraded again, with Pat McLung.
The scenes on the Klingon bridge were among the last to be filmed for STAR TREK: THE MOTION PICTURE. TMP's production designer, Harold Michelson, had moved on to another project by the time they were filmed, so the task of designing the bridge fell to Douglas Trumbull. "There was something that would be intrinsically malevolent about this interior," he remembers. "I came up with the idea that it would be heavily rigged for battle and would have these huge shock absorbers that would kind of look like spider legs."

Trumbull asked Andy Probert to take this brief and come up with some concepts for the bridge. "He wanted to get the feeling of an enemy's greasy, dark, crowded interior," Probert says, "like the inside of a submarine, and he wanted to have these huge shock absorbers to keep the bridge area dampened from any hits the ship might take. That was basically all he said, so I came up with several sketches."

The bridge set was always designed with visual effects in mind. Trumbull planned an impressive shot where the beam that 'digitized' the Klingon ship engulfed the ship from the back. "Trumbull wanted to see the energy wave from V'Ger go through the bridge," Probert explains. The solution was to build the bridge in six different sections that could be rolled out of place and replaced with a bluescreen as the bridge disappeared. In the end the shot in which the bridge disappeared was barely a second long, but filming the sequence was a real technical challenge and shows the level of the filmmakers' ambition.
These images show the finished model that was used for filming *STAR TREK: THE MOTION PICTURE* from a variety of angles. The script for the *STAR TREK PHASE II* pilot identified the ship as Koro-class, but the novelization of TMP renamed it the K'T'inga-class.
taking the opportunity to rewire the lighting and upgrade the paint scheme.

As Dykstra recalls, they wanted to show that V’Ger was actually digitizing everything it encountered, so when the beam hits them, the Klingon ships weren’t actually destroyed. “Rather than blowing them up in a great huge explosion we came up with the idea that this thing somehow transformed the mass of the ship into an enormous amount of energy.” The plan was that when Spock entered V’Ger he would see the Klingon ships recorded inside it. Robert McCall proposed several concept paintings showing this.

For a long time no-one was sure exactly how the movie was going to end. As Probert remembers, Trumbull suggested that when V’Ger dissipated, the Klingon ships could return.

“Trumbull’s idea was that V’Ger dumps all of these memory crystals into orbit, and a couple of them collide and develop back into the Klingon battle cruiser. His thought was that in a kind of a knee-jerk reaction the Klingon commander sees the Enterprise, their enemy, and fires on it.”

McCall produced a painting showing the Enterprise and the Klingon ships together and Probert worked on some storyboards for the proposed sequence, adding the idea that during the battle the Enterprise would separate its saucer for the first time, after the Klingon ship had disabled her engines.

“The Klingon battle cruiser spins around to head home,” Prabert explains. “Meanwhile, the saucer separates from the Enterprise to pursue this battle cruiser. Trumbull’s idea for the ending of the movie is that the Klingon ship is limping back on its impulse power as the saucer goes after it, and freeze frame.”

The model of the battle cruiser was available to the STAR TREK: THE NEXT GENERATION VFX team along with the other models that were used in the features, but it barely made any appearances on the small screen. Greg Jein did make new models of the battle cruiser using the molds that Magicam had made for PHASE II, one of which featured prominently in ‘Trials and Tribble-ations.’ Foundation Imaging created a CG version of the battle cruiser for DEEP SPACE NINE for use in many of the large battle sequences.

The original K’t’inga model was brought out of storage for STAR TREK VI, where it served as Chancellor Gorkon’s flagship Kronos One. ILM’s John Goodson and Mark Moore repainted it, giving it a more elaborate paint scheme that they reasoned was appropriate for the Klingon chancellor. While the model has only been used sparingly, the design has become a classic that has inspired the design of many other Klingon ships. As recently as 2019, a new version of the D7 battle cruiser made its debut on STAR TREK: DISCOVERY, bringing the battle cruiser full circle, establishing its introduction in the STAR TREK universe a decade or so before its appearances in the original series.