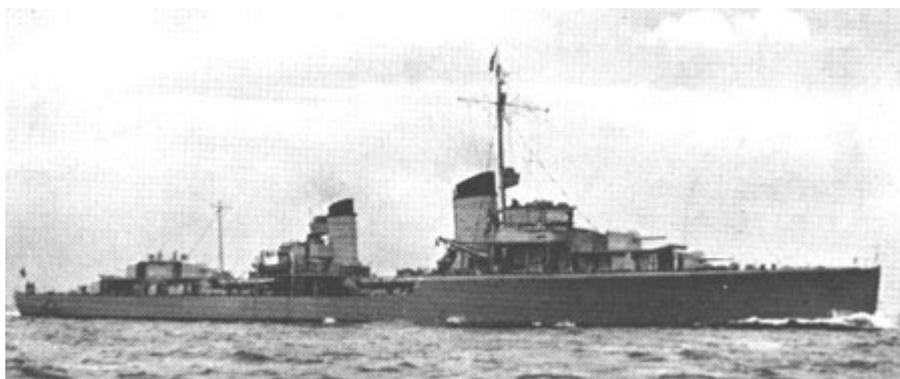


1934-TYPE DESTROYER

Briefing

written by

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KEY INFORMATION

Country of Origin:	Germany
Manufacturers:	Deutsche Werk, Deschimag, Germaniawerft, Blohm & Voss
Major Variants:	Type 34A
Role:	Fleet protection, reconnaissance, convoy escort
Operated by:	Kriegsmarine (Some by Britain, France and USSR post-war)
First Laid Down:	10 October 1934
Last Completed:	28 August 1939
Units:	<i>Lebercht Maas, Georg Thiele, Max Schultz, Richard Beitzen, Paul Jacobi, Theodor Riedel, Hermann Schoemann, Bruno Heinemann, Wolfgang Zenker, Hans Lody, Bernd von Arnim, Erich Giese, Erich Koellner, Friedrich Ihn, Erich Steinbrinck, Friedrich Eckoldt</i>

OVERVIEW

In 1919, the Treaty of Versailles restricted Germany to 12 commissioned destroyers (plus an unspecified number of reserve ships), and stipulated that any future destroyers must displace less than 800 tons¹. In the 1920s, all the major naval powers were building destroyers that were significantly larger than this, and in 1930 they agreed to limit destroyers to a maximum of 1,850 long tons (1,880 metric tonnes), with the majority not exceeding 1,500 long tons (1,524 metric tonnes). Germany, however, was still expected to comply with the Versailles treaty limitations.

In November 1932 (before Hitler came to power) the German navy began planning a force to respond to the large destroyers being built by Poland and France. These plans called for a reserve force of large destroyers considerably in excess of the Versailles treaty limitations (around 1,500 long tons), and approval was given to begin design work on these ships in March 1933 (over two years before Hitler was to officially renounce the Versailles treaty). It was recognised that in any future war Germany would be numerically outnumbered by her potential enemies, however the intention was to offset this by building destroyers that were individually superior to those of other nations and to this end the design size of these ships was soon pushed up to 1,850 long tons.

The ships were fitted with five 127 mm (5 in) guns, in five single mounts, giving them a one-gun advantage over the British and French destroyers currently in service. Interestingly, they were only allocated 120 rounds per gun (giving them a maximum of seven minutes continuous firing under ideal 'practice' conditions), compared to 200 rounds per gun in contemporary British designs (and increased to 250 rounds per gun in later British designs).

Eight 533 mm (21 inch) torpedo tubes were fitted, with a nominal eight torpedo reloads (although only four were provided in practice). This matched contemporary British designs, and exceeded the French provision of six tubes, neither of which was fitted with torpedo reloads.

Two sets of twin 37 mm (1.5 in) guns were provided for air defence. These were gyro-stabilised, although this failed on occasion during sharp turns at high speed. They theoretically fired up to 160 rounds per minute, however in action only 80 rounds per minute was achieved. The defences were rounded off with six 20 mm (0.8 in) guns.

Surprisingly, given the German experience with submarines, only limited anti-submarine facilities were provided. The ships were initially fitted with hydrophones (passive listening devices), fixed to the sides of the ship. An active device was developed, however it was only introduced slowly (two of the Type 34 / 34A had been upgraded by the end of 1939, and it wasn't until the end of 1940 that all ships had been equipped). Four launchers and two rails were provided for depth charges, but only 18 depth charges were fitted (four on the launchers and six on each rail).

High speed was an important requirement, to enable the ships to escape from a numerically superior enemy and to allow operations (particularly minelaying) to be undertaken at night, with the vessels returning to protected waters before daybreak. Unfortunately, the new design of boiler proved to be less than reliable, hampering the availability of the ships for operations.

These ships were sound in principle, however they suffered from a number of problems primarily caused by Germany's lack of design and operational experience after the First World War. These problems manifested themselves in a number of areas, such as hull cracks (due to lack of structural strength, the design of the stern causing sagging, and weakness of the bow design), seakeeping and stability problems (due to high topweight and narrow beam), large turning circle (due to the stern design), low reliability (due to the new boiler design), spray forward (due to the bow design) and being significantly overweight on completion. In addition, the low ammunition supply was important on at least one occasion (with several ships running out of ammunition in the Second Battle of Narvik), and the torpedo reloads were difficult to undertake at sea. Teething problems are to be expected in any new warship design, however Germany did not have the time to iron out the problems before the Second World War began. Nevertheless, these were the most numerous type of destroyer produced by Germany, and provided much needed information for subsequent designs.

¹ Not defined as long tons, short tons or metric tonnes

UNITS

Ship	Builder	Laid Down	Launch	Completed	Left Service	Fate
<i>Z1 Lebercht Maas</i>	Deutsche Werk	10 Oct 1934	18 Aug 1935	14 Jan 1937	22 Feb 1940	Attacked by Luftwaffe (HE111) and either sunk by bombing or hit British mine whilst evading.
<i>Z2 Georg Thiele</i>	Deutsche Werk	25 Oct 1934	18 Aug 1935	27 Feb 1937	13 Apr 1940	Heavily damaged in the 2 nd Battle of Narvik. Deliberately run aground, where she broke in two.
<i>Z3 Max Schultz</i>	Deutsche Werk	2 Jan 1935	30 Nov 1935	8 Apr 1937	22 Feb 1940	Attacked by Luftwaffe (HE111) and either sunk by bombing or hit British mine whilst evading.
<i>Z4 Richard Beitzen</i>	Deutsche Werk	7 Jan 1935	30 Nov 1935	13 May 1937	1945	To UK as war prize. Used as target ship. Scrapped in 1949.
<i>Z5 Paul Jacobi</i>	Deschimag	15 July 1935	24 Mar 1936	29 Jun 1937	17 Feb 1954	To UK as war prize, then to France. Scrapped.
<i>Z6 Theodor Riedel</i>	Deschimag	18 July 1935	22 Apr 1936	2 Jul 1937	3 April 1957	To UK as war prize, then to France. Scrapped.
<i>Z7 Hermann Schoemann</i>	Deschimag	7 Sept 1935	16 Jul 1936	9 Sep 1937	2 May 1942	Scuttled in Barents Sea (72° 20' N, 35° 05' E) after being immobilised and holed by <i>HMS Edinburgh</i> .
<i>Z8 Bruno Heinemann</i>	Deschimag	14 Jan 1936	15 Sept 1936	8 Jan 1938	25 Jan 1942	Sank in English Channel after hitting mines (Operation Cerberus).
<i>Z9 Wolfgang Zenker</i>	Germaniawerft	22 Mar 1935	27 Mar 1936	2 Jul 1938	13 Apr 1940	Scuttled during 2 nd Battle of Narvik after running out of fuel and ammunition.
<i>Z10 Hans Lody</i>	Germaniawerft	1 April 1935	14 May 1936	13 Sep 1938	1949	To UK as war prize. Scrapped.
<i>Z11 Bernd von Arnim</i>	Germaniawerft	26 April 1935	8 Jul 1936	6 Dec 1938	13 Apr 1940	Scuttled after running out of ammunition in 2 nd Battle of Narvik.
<i>Z12 Erich Giese</i>	Germaniawerft	3 May 1935	12 Mar 1937	4 Mar 1939	13 Apr 1940	Sunk during 2 nd Battle of Narvik.
<i>Z13 Erich Koellner</i>	Germaniawerft	12 Oct 1935	18 Mar 1937	28 Aug 1939	13 Apr 1940	Sunk whilst acting as floating battery in 2 nd Battle of Narvik (Heavily damaged in 1 st battle).
<i>Z14 Friedrich Ihn</i>	Blohm & Voss	30 May 1935	15 Nov 1936	6 Apr 1938	1960s	To USSR as war prize. Scrapped in 1960s
<i>Z15 Erich Steinbrinck</i>	Blohm & Voss	30 May 1935	24 Sep 1936	31 May 1938	1960s	To USSR as war prize. Scrapped in 1960s
<i>Z16 Friedrich Eckoldt</i>	Blohm & Voss	4 Nov 1935	21 Mar 1937	28 Jul 1938	31 Dec 1942	Sunk by <i>HMS Sheffield</i> during Battle of the Barents Sea.

SPECIFICATIONS

	Z1-Z4	Z5-Z8	Z9-Z13	Z14-Z16
Displacement				
- Standard	2,232 tons (2,268 tonnes)	2,171 tons (2,206 tonnes)	2,270 tons (2,306 tonnes)	2,239 tons (2,275 tonnes)
- Full Load	3,156 tons (3,206 tonnes)	3,110 tons (3,160 tonnes)	3,190 tons (3,241 tonnes)	3,165 tons (3,216 tonnes)
Length (OA)	119.00 m (390 ft 5 in)		121.00 m (397 ft 0 in)	
Length (WL)	114.00 m (374 ft 0 in)		Unknown	
Beam	11.30 m (37 ft 1 in)		11.30 m (37 ft 1 in)	
Draft (Standard)	3.80 m (12 ft 6 in)		3.80 m (12 ft 6 in)	
Draft (Full Load)	4.30 m (14 ft 1 in)		4.30 m (14 ft 1 in)	
Block Coefficient	0.56		Unknown	
Propulsion	70,000 shp (52.2 MW)		70,000 shp (52.2 MW)	
Speed	38 kts		38 kts	
Weapons				
Main Guns	5 x 127 mm (5 in) guns in five single mounts ^[Notes 1, 2]			
Other Guns	4 x 37 mm (1.5 in) cannon in two double mounts ^[Notes 3, 4, 5]			
	6 x 20 mm (0.8 in) machineguns in six single mounts ^[Note 6]			
Torpedo Tubes	8 x 533 mm (21 in) torpedo tubes in two quadruple mounts			
Depth Charges	4 x launchers, two each side of the superstructure			
	2 x rails, fitted at stern			
Magazine ^[Note 8]	600 x 127 mm rounds			
	8,000 x 37 mm rounds			
	12,000 x 20 mm rounds			
	8 torpedoes + 4 x torpedo reloads ^[Note 7]			
	18 depth charges (total) ^[Note 9]			
	60 mines ^[Note 9, 10]			
Miscellaneous				
Compliment	325 (350 flotilla leader)			

Note 1: *Bruno Heinemann* temporarily fitted with four x 150 mm guns in 1939

Note 2: *Paul Jacobi*, *Hans Lody* and *Erich Steinbrinck* reduced to four guns in 1944

Note 3: *Paul Jacobi* increased to 10 guns in 1944

Note 4: *Hans Lody* increased to 12 guns in 1944

Note 5: *Erich Steinbrinck* increased to 14 guns in 1944

Note 6: Two additional 20 mm guns added to some ships after the middle of 1942

Note 7: Ships were intended to carry eight spare torpedoes, however only four were shipped in practice

Note 8: Magazine size adjusted in line with armament changes to keep constant the number of rounds per gun

Note 9: Mines not always carried, and if carried the depth charges were generally removed

Note 10: Design capacity 77, although 60 were carried initially. This was reduced later in the war to 42 to lessen stresses on the hull