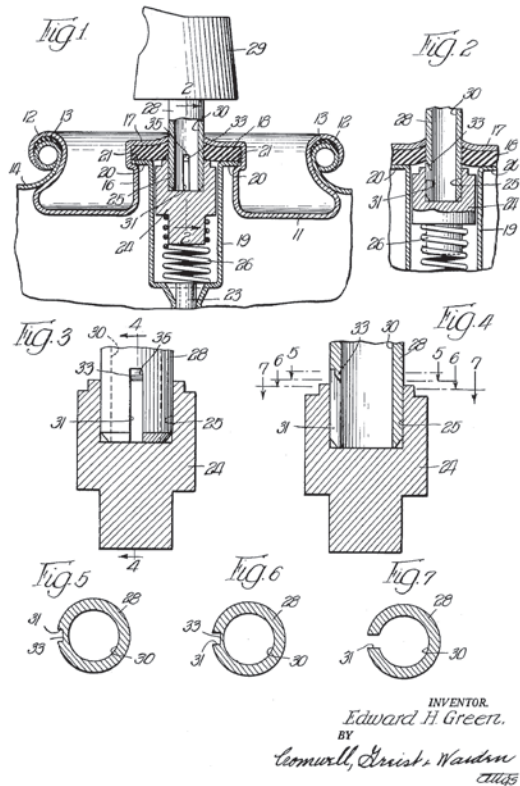


AEROSOLS



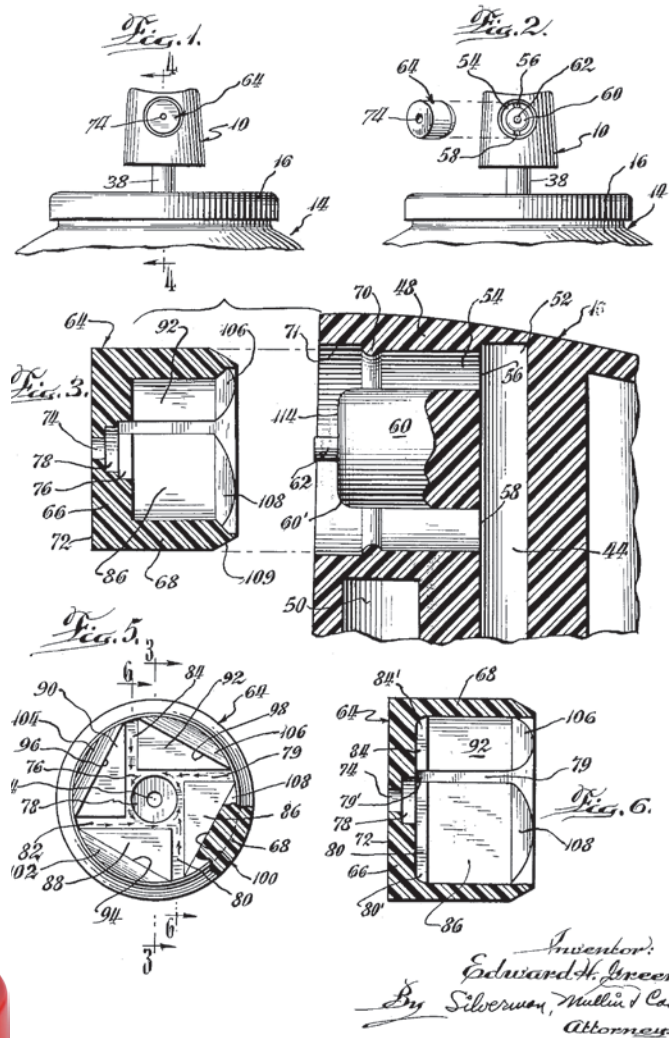
6 x 400 ml

643
349



← Original drawing of an aerosol dispenser valve by Edward H. Green, 1962, Patent: US 3045877 A

↓ Original drawing of a spray head for swirling spray by Edward H. Green, 1964, Patent: US 3129893 A



← Spray-head by Lindal

Another pioneer who helped to create today's spray cans was **Edward H. Green**, who also developed aerosol valves and matching caps. He founded *Newman-Green Inc.* in 1947, and the company has been creating female valves for assorted applications ever since. Starting in 1959, the Hamburg-based *Lindal* company produced and sold female aerosol valves for the European market as a licensee of *Newman-Green*. In 1980, *Lindal's* licensing agreement with *Newman-Green* came to an end. *Lindal* has operated independently ever since. The company *Deutsche Aerosol-Ventile* was acquired by the *Lindal Group* in 1997. Almost all spray paint cans produced in Germany have valves and caps by *Lindal*. The caps can be identified by the letters "LI". ❌



"No matter how advanced spray paint has gotten, it's still a health hazard. So a gas mask is a must when spraying!" DAIM / Germany

How spray cans are produced

The spray cans in common use today are manufactured out of two different materials: tin-plate and aluminium. The production processes vary widely. Very few classic spray paint cans are still made of aluminium. I've only encountered traditional aluminium cans from former East Germany, Poland, and Czechoslovakia.

Tin-plate aerosol cans

Ordinary spray cans are made out of long strips of tin-plate (tin-coated steel). The cans are composed of three separate parts. First tin-plate sheets are cut out and then coated. The exterior coating consists of several layers. The tin is first primed with a white lacquer, over which the label is printed in colour, followed by a protective coating. Depending on the can's intended contents, an interior coating may be added to protect against corrosion. After the coating process, the sheet is cut into can-sized pieces, which are formed into a cylinder, and the edges are welded closed. The welded seam is protected from rust with extra lacquer or a layer of powder. Meanwhile the base and top pieces are pressed out of tin sheets. After the batches are fitted together, the three pieces are attached securely by seaming the edges of the top and base.¹³

¹³ Wikipedia, de.wikipedia.org/wiki/Sprühdose, Aufbau einer Sprühdose, Sept. 2014



↑ Sample of an aluminium can / photo: Igor Kovalchuk, fotolia.com

Aluminium aerosol cans

These spray cans, produced out of a single piece, are known as "monobloc" spray cans after the ubiquitous one-piece plastic chairs. Beginning with flat, circular pieces of metal (called "slugs"), a hydraulic press punches out the bodies of the cans in a process called impact extrusion. Since these cans are made of raw aluminium, they still require further treatment. The cans are first washed and then coated inside and out. After the sides are printed in colour, the cans' "shoulders" and valve seats are formed. To guarantee flawless functionality, every can is tested for airtightness.¹³ ❌



Peter Kwasny GmbH

The Peter Kwasny company has a long history of innovation. After visiting the United States in 1956, the eponymous Peter Kwasny brought the concept and knowledge of how to produce spray paint cans home to Germany. Only two years later, he launched *Kwasny & Vogelsang KG*, the first automotive spray paint and touch-up stick production company. Then in 1963, Peter Kwasny founded *Peter Kwasny GmbH* at his newly established headquarters in Gundelsheim, Germany. In 1966, the very first *AUTO-K Spray-Set*, the “painting workshop in a can” was introduced. The company’s well-known *Belton* spray paint was produced starting in 1973. In 1981, a large warehouse was opened in Sinsheim. The company launched the *MULTONA* brand in 1987 and acquired the French producer *HERPÉ* in 1994. The invention of *SprayMax* in the late 1990s was another company milestone.

In Germany, *AUTO-K* is the household name for quick and easy touch ups to car paint. The slogan “painting workshop in a can” became a watchword in the industry, and Peter Kwasny was a pioneer in spray cans for automotive touch up. The self-named company he founded, *Peter Kwasny GmbH*, has played a formative role in the rapid development of spray paint in the last few decades.

For almost 50 years now, they have been sending spray paint worldwide (supplying countries such as Australia, South Africa, the US, and others). The company has come full circle. Almost 60 years ago, Peter Kwasny brought the idea of producing automotive spray paint from the US to Germany. Now Kwasny supplies the US with premium 2K Special spray paint.¹⁴ ✕

¹⁴ Kwasny – Innovation hat Tradition, www.kwasny.de, September 2014

→ First *AUTO-K Spray-Set* / *AUTO-K Lack* Peter Kwasny, Gundelsheim, Germany / 1966
 ← *AUTO-K Fluorescent Spray*, 1981 / *Lack-Spray*, 1984 / *AUTO-COLOR*, 1987 / *Plastik-Farbspray*, 1990 / *Auto-K Lack* Peter Kwasny, Gundelsheim, Germany
 Photos: Archive of Peter Kwasny GmbH





In 1946, Kurt Vogelsang AG was founded in Schwerzenbach, Switzerland. One year later the company introduced the very first paint roller. At the time the innovation was laughed off; today it is an indispensable tool for every painter or do-it-yourselfer. They also developed and produced liquid wallpaper, finishing compounds, emulsion indoor paint, and lacquer.

In 1956, with business booming, Kurt Vogelsang AG moved to Hassmersheim in the Neckar valley, occupying a former BASF paint production site. It was a perfect location. Vogelsang's main customer, the NSU auto maker, was only a few kilometres away in Neckarsulm.

In 1956, Vogelsang produced the first touch-up stick in original car colours for concealing paint damage. One year later, they produced their first spray paint in original car colours.

↑ DUPLI-COLOR, Kurt Vogelsang GmbH Lackspray ad / 1965
 < DUPLI-COLOR ACRYL AUTO-SPRAY "silberdistel met."
 Kurt Vogelsang GmbH, Haßmersheim, Germany / 1965

DUPLI-COLOR / Kurt Vogelsang GmbH

In the early 1960s, the company supplemented their successful automotive line with products for decorative uses according to RAL colour standards. From the 1970s, Vogelsang developed an increasing number of special paints for the home and hobby sector such as bronze, hammered, metallic, or heat-resistant paint. By 1975, the spray paint product line spanned roughly 1,500 hues and shades. The company produced their 100-millionth can of spray paint as early as 1978. The same year, they switched to a CFC-free propellant to eliminate emissions of gases that harm the ozone layer.

In 1986, they developed a water-based spray paint. By the end of the 1980s, Kurt Vogelsang GmbH had produced a total 250 million aerosol cans. In 1990, the range of spray paint and touch-up sticks covered more than 2,000 different hues in 12 ml, 150 ml, and 400 ml sizes.

As the quality of the water-based Aqua-Lack improved, in 1991 the product line was awarded the "blue angel" for its especially eco-friendly composition. In 1995, Kurt Vogelsang GmbH was the first spray can manufacturer to have its quality certified under the ISO 9001 standard. Two years later, the 400 millionth can was bottled in Hassmersheim.

In 1998, Vogelsang had a product range spanning more than 50,000 items in more than 4,000 different hues. The Swiss holding company then merged with Motip b.V., based in the Netherlands, to become Motip Dupli Group N.V. The headquarters were moved to Lelystad, the Netherlands. In 1999, Vogelsang developed a patented spray security ring to prevent the misuse of aerosol cans at the point of sale and to protect children. The following year, the German subsidiary Kurt Vogelsang GmbH was renamed Motip Dupli GmbH. ✕

KRYLON Spray Paint "HIMMELBLAU" / Imported by Domit AG, Glattbrugg, Switzerland / 1990^a
KRYLON PEINTURE "ROSE PASTEL" / Imported by SEDPA, La Madeleine, France / 1988^b



78 ml



KRYLON PEINTURE "ROSE" / Imported by SEDPA, Marquette-lez-Lille, France / 1992
KRYLON PEINTURE / Imported by SEDPA, Perenchies, France / 1999

79 ml

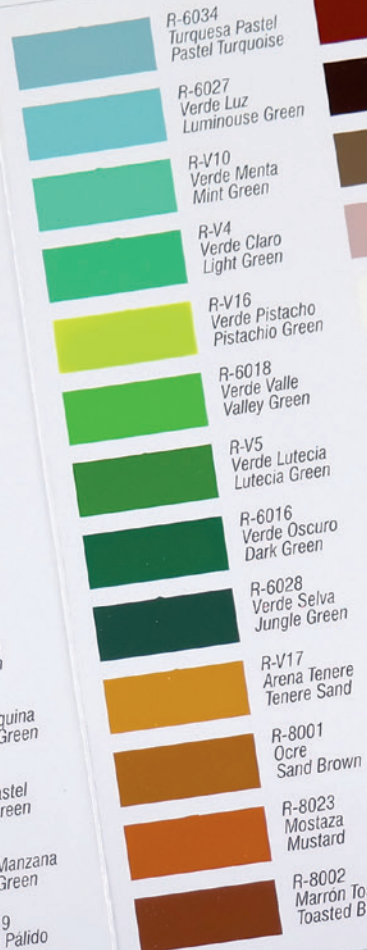


MONTANA COLORS, S.L. - c/ Berlín s/n. - Poligon Industrial Can Torrella
08233 VACARISSES - Barcelona - Tel. (93) 828 04 41 - Fax (93) 828 03 45

montana

PINTURA PAINT SPRAY

CARTA DE COLORES



**ELECTRODOMESTICO
HOUSEMACHINE**

Blanco
White

**METALIZADOS
METALLICS**



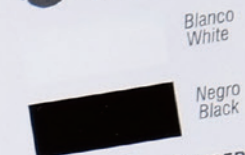
**FLUORESCENTES
FLUORESCENTS**



**MATES
MATTES**



**SATINADOS
SATINS**



**ALTA TEMPERATURA
HIGH TEMPERATURE**



**DIFUSORES
CAPS**

