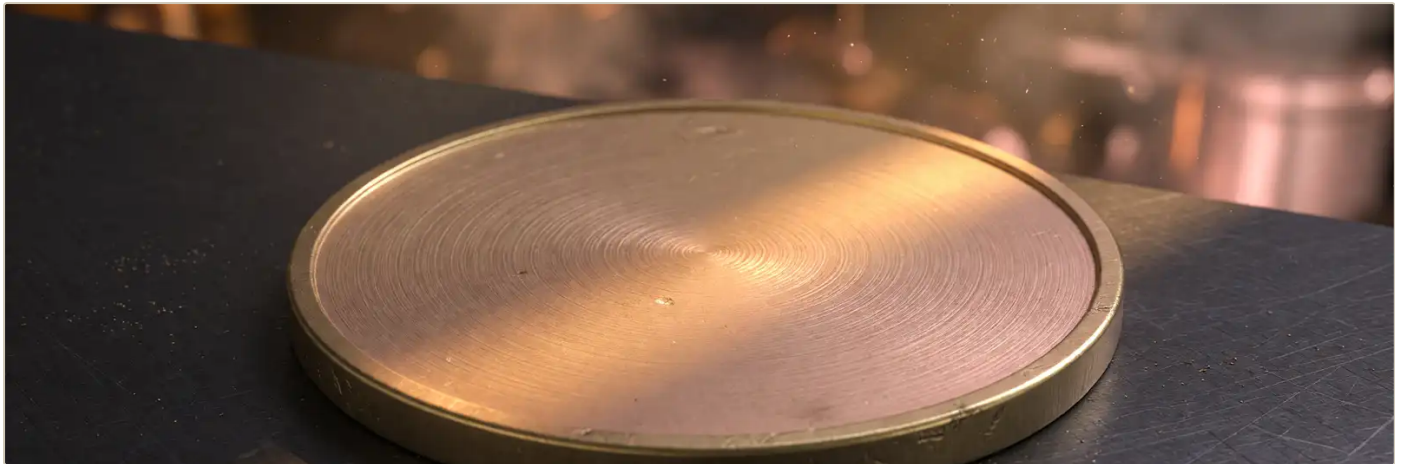


Diecast: a struck-face token.



01 Abstract

Diecast is an Ethereum token with a fixed supply of 400,000 DIEC, all of it tradable from day one. Every trade pays a 2% Trade Fee. At construction the contract is struck with exactly one face from a fixed set of five, chosen by the deployer and written permanently; the struck face decides how every fee divides between retiring supply and deepening the market's liquidity. Every transfer reads the face to compute the division, so the choice governs the market for the life of the token. There is no setter, no second strike and no restrike authority, and the face is publicly readable from block one. The deployer holds no power over balances, trading, or retired supply. This document is the complete statement of those rules.

02 The problem, stated once

A token's economic rules are only as good as the strongest hand that can rewrite them. Where a fee can be tuned after launch, every holder is a counterparty to whoever holds the dial; where a supply can grow, every balance is an invitation to dilution. The usual answers — promises, multisigs, timelocks — move the dial; they do not remove it.

Diecast's answer is subtraction. The fee, the split rule and the supply are written once at construction, and the contract is built without the functions that could accept new values. One decision remains — which face to strike — and it is made exactly once, in the open, before the first trade.

03 Design

There are five parts, and their boundaries are the design. The **Face Set** is the fixed menu of five faces; it cannot grow, shrink or reorder. The **struck face** is the single member chosen at

construction; it cannot be replaced or re-read as anything else. The **Trade Fee** is 2% of each buy and each sell; it cannot be returned, waived or collected by a wallet. **Retired Supply** is the DIEC the fee removes from circulation; it cannot be spent, recovered or reissued. **Pool Depth** is the share of the fee that stays in the market; it cannot be redirected to a third destination.

Authority in the contract is exhausted by one entry: the deployer makes the Face Choice at construction. Every other capability a token might have — moving balances, pausing trading, minting, restriking — is absent, and each absence is load-bearing.

04 Parameters

NAME	VALUE	UNIT	LIVES	SETTER
Supply	400,000	DIEC	the token contract	none
Tradable from day one	400,000	DIEC	the Pool	none
Trade Fee	2	% of each trade	the token contract	none
Face Set	5	faces	the token contract	none
Split rule	the struck face	read per transfer	the token contract	none
Venue	Uniswap v4	Ethereum	the Pool	not a setting
Quote asset	ETH	per DIEC	the Pool	not a setting
Balance authority	holder only	per wallet	the token contract	none
Market pause	does not exist	no switch	nowhere	none
Reissue	does not exist	no minter	nowhere	none

05 Mechanism

The mechanism runs on every transfer; there is no schedule, no keeper and no trigger to wait for. When a trade moves DIEC, the transfer takes 2% of the traded amount as the Trade Fee. The transfer then reads the struck face — the permanent value written at construction — and divides the fee as that face commands. The retiring share is removed from circulation permanently. The deepening share remains in the market, adding to the Pool's depth. The division is recorded on-chain as part of the transfer, so every fee is traceable to its two destinations by anyone.

The five faces differ only in the division. Full Retire retires the whole fee. Full Pool retires nothing and deepens only. Retire Lean, Centre Split and Pool Lean sit between those poles, each fixing its

own division of every fee. The faces are the entire vocabulary of the mechanism: no face changes the fee's size, the supply's rule, or any balance but the two destinations'.

06 Worked examples

A busy day, supposed. Imagine a day of 200 trades averaging 500 DIEC each: 100,000 DIEC of volume, and 2,000 DIEC of Trade Fee. Under Full Retire, 2,000 DIEC is retired that day — the supply ends the day that much smaller, permanently. Under Full Pool, the same 2,000 DIEC remains in the market as added depth. Under a leaning face, the 2,000 divides between the two, in the face's fixed proportion.

A quiet day, supposed. Imagine a day of three trades totalling 400 DIEC: 8 DIEC of Trade Fee, divided the same way by the same face. The mechanism does not distinguish between the two days — the rule is per trade, not per day, and volume changes only how often the rule runs.

07 Failure and edge cases

- **A day with no trades.** No transfers, no fees, no divisions. Nothing happens; the rules wait.
- **A failed transfer.** A trade that reverts settles nothing: no DIEC moves, no fee is taken, no division occurs.
- **An empty balance.** A wallet holding no DIEC can neither trade nor be charged; there is nothing to take a fee from.
- **A very small trade.** The same rule applies to whatever amount the transfer carries; there is no minimum trade and no exemption.
- **A call to change the face.** There is no such function. The call cannot be made, by anyone, ever.

08 What cannot change

The fixed set, and why each member has no setter. The **supply** is fixed because no function creates DIEC; issuance would make every balance a standing invitation to dilution. The **Trade Fee** is fixed because a tunable fee is a dial over every future trade. The **split rule** is fixed with the face, because a rewritable division is a promise, not a rule. The **face** itself cannot be restruct: no second strike exists, and no restrike authority with it. Balances cannot be moved by anyone but their holder, the market cannot be paused, and retired supply cannot be reissued — each absence closes a different way of reaching into a holder's position.

09 Verification

- **The face.** Read it from the contract on the explorer; it is public from block one.

- **The fee and the split.** Inspect any trade's transaction: the 2% leaves with the transfer and arrives at the two destinations.
- **Retired supply.** Track the total supply reading over time; it steps down and never steps up.
- **Pool depth.** The Pool's liquidity is public market data on Uniswap v4.
- **The absences.** Search the contract's functions for a setter, a pause, a minter and a restrike. The search failing is the proof.

10 Notation and definitions

TERM	MEANING
Diecast · DIEC	The token and its symbol; supply 400,000, all tradable from day one.
The Face Set	The fixed set of five faces: Full Retire, Retire Lean, Centre Split, Pool Lean, Full Pool.
The Face Choice	The deployer's single decision at construction: which one face is struck.
The struck face	The face written permanently into the contract; a public reading from block one.
The Trade Fee	2% of each buy and each sell, taken with the transfer.
Retired Supply	DIEC removed from circulation permanently; never reissued.
Pool Depth	The share of the fee that remains in the market as liquidity.
The Pool	The market itself — trades run on Uniswap v4, priced in ETH, settled on Ethereum.